

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
EASTERN DIVISION

UNITED STATES OF AMERICA,

and

ALABAMA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT,

Plaintiffs,

v.

KRONOSPAN, LLC,

Defendant.

Civil No. 1:20-cv-01720 - ACA

CONSENT DECREE

TABLE OF CONTENTS

I.	<u>INTRODUCTION</u>	1
II.	<u>JURISDICTION AND VENUE</u>	8
III.	<u>APPLICABILITY</u>	8
IV.	<u>OBJECTIVE</u>	9
V.	<u>DEFINITIONS</u>	10
VI.	<u>CIVIL PENALTY</u>	16
VII.	<u>REVIEW, APPROVAL, AND IMPLEMENTATION OF DELIVERABLES</u>	18
VIII.	<u>COMPLIANCE REQUIREMENTS</u>	22
IX.	<u>WORK TO BE PERFORMED</u>	23
X.	<u>SUPPLEMENTAL ENVIRONMENTAL PROJECT</u>	44
XI.	<u>SAMPLING & REPORTING REQUIREMENTS</u>	47
XII.	<u>STIPULATED PENALTIES</u>	52
XIII.	<u>FORCE MAJEURE</u>	58
XIV.	<u>DISPUTE RESOLUTION</u>	61
XV.	<u>INFORMATION COLLECTION AND RETENTION</u>	64
XVI.	<u>EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS</u>	67
XVII.	<u>COSTS</u>	68
XVIII.	<u>NOTICES</u>	68
XIX.	<u>EFFECTIVE DATE</u>	71
XX.	<u>RETENTION OF JURISDICTION</u>	71
XXI.	<u>MODIFICATION</u>	71
XXII.	<u>TERMINATION</u>	72
XXIII.	<u>PUBLIC PARTICIPATION</u>	72
XXIV.	<u>SIGNATORIES/SERVICE</u>	73
XXV.	<u>INTEGRATION</u>	73
XXVI.	<u>FINAL JUDGMENT</u>	74
XXVII.	<u>APPENDICES</u>	74

I. INTRODUCTION

1. WHEREAS, Plaintiffs, the United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), and the Alabama Department of Environmental Management (“ADEM”), an agency of the State of Alabama, have filed a complaint in this action concurrently with this Consent Decree, alleging that Defendant, Kronospan, LLC (“Kronospan”), violated Section 307(d) of the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 and the Water Quality Act of 1987 (collectively referred to as the “Clean Water Act” or “CWA”), 33 U.S.C. § 1317(d); violated the Alabama Water Pollution Control Act, Ala. Code § 22-22-1 et seq. (“AWPCA”); and seeking injunctive relief and civil penalties pursuant to the CWA, 33 U.S.C. 1319(b) and (d); the AWPCA, Ala. Code § 22-22-9; and the Alabama Environmental Management Act (“AEMA”), 22-22A-5. See also Ala. Admin. Code r. 335-6-5-.20(2).

2. WHEREAS, the EPA is charged with the statutory duty of enforcing the CWA, pursuant to 33 U.S.C. § 1251 et seq. and the regulations promulgated pursuant thereto.

3. WHEREAS, pursuant to Ala. Code § 22-22A-4(n), ADEM is the state agency responsible for the promulgation and enforcement of water pollution control regulations in accordance with the CWA, and is authorized to administer and enforce the provisions of the AWPCA and the regulations promulgated pursuant thereto.

4. WHEREAS, pursuant to Section 307 of the CWA, 33 U.S.C. § 1317, the EPA has established standards that govern discharges into publicly-owned treatment works (“POTWs”) that discharge to waters of the United States. The General Pretreatment Regulations, found at 40 C.F.R. Part 403, are designed to ensure that each

POTW can comply with its National Pollutant Discharge Elimination System (“NPDES”) permit. These Regulations are intended to prevent discharges to a POTW from non-domestic users that can either interfere with its operations or lead to the discharge of untreated or inadequately treated wastewater into waters of the United States. In addition to the General Pretreatment Regulations, the EPA has promulgated pretreatment standards for specific categories of industrial users pursuant to Section 307(b) of the CWA, 33 U.S.C. § 1317(b). These categories of industrial users, or “categorical” industrial users, are subject to specific pretreatment requirements set forth at 40 C.F.R. Parts 405-471. See also Ala. Admin. Code r. 335-6-5-.06.

5. WHEREAS, ADEM is the state agency with the authority to administer the Pretreatment Program in Alabama, pursuant to 33 U.S.C. § 1342(b).

6. WHEREAS, pursuant to 40 C.F.R. § 403.10(e), ADEM has assumed responsibility for implementing the Pretreatment Program in Alabama in lieu of requiring POTWs to develop independent pretreatment programs. As such, ADEM is the “Control Authority” as defined by 40 C.F.R. § 403.3(f) and is responsible for the requirements in 40 C.F.R. § 403.8(f), including issuing permits to categorical industrial users.

7. WHEREAS, Defendant owns and operates the facility located at 1 Kronospan Way, Eastaboga, Calhoun County, Alabama (“Facility”), where Defendant manufactures reconstituted wood products. The Facility is an integrated pulp and fiberboard mill.

8. WHEREAS, the pulp, paper, and paperboard manufacturing industry is one of the specified industries subject to categorical pretreatment standards. See

40 C.F.R. Part 430, Subpart G. These categorical pretreatment standards apply to process wastewater discharges resulting from, among other things, integrated pulp mills and molded fiber product production. See 40 C.F.R. § 430.70.

9. WHEREAS, Defendant began discharging wastewater from the Facility to the Oxford Water Works and Sewer Board's ("OWSB") POTW in late 2007 with trial applications without first obtaining a valid SID Permit from ADEM, as required by Ala. Admin. Code r. 335-6-5-.04(2).

10. WHEREAS, OWSB operates its POTW pursuant to NPDES Permit No. AL0058408, issued by ADEM, which requires, among other things, that OWSB "at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by [OWSB] to achieve compliance with the conditions of the [NPDES] permit. Proper operation and maintenance includes effective performance"

11. WHEREAS, on January 15, 2008, after having commenced discharging several months prior, Defendant applied to ADEM for an SID permit.

12. WHEREAS, Plaintiffs allege that, beginning in 2008 and continuing through at least 2015, OWSB's POTW experienced chronic violations of its permitted effluent limitations, including for total suspended solids ("TSS"), ammonia-nitrogen, fecal coliform, carbonaceous biochemical oxygen demand ("CBOD"), and total residual chlorine, as documented in OWSB's discharge monitoring reports ("DMRs").

13. WHEREAS, Plaintiffs allege that OWSB's POTW's effluent limitation violations began several months after Defendant's Facility began discharging to it.

14. WHEREAS, Plaintiffs allege that the Facility's discharge to the POTW routinely contained TSS, ammonia-nitrogen, and oxygen-demanding pollutants during the period concurrent with the POTW's effluent limit violations for TSS, ammonia-nitrogen, and CBOD.

15. WHEREAS, Plaintiffs allege that, beginning in April 2008, OWSB believes that it experienced interference with the proper operation of its POTW due to the pollutants in the discharge from Defendant's Facility, which was observed and measured in some samples to have high temperatures (in excess of 130 Degrees Fahrenheit ("F")), low pH levels, very high levels of TSS, excessive wood chips, high levels of formaldehyde, and high biochemical oxygen demand ("BOD"). This alleged interference included: a deterioration in performance of the POTW's wastewater treatment plant ("WWTP"); damages to POTW transmission equipment; increased solids loading and solids handling; significant foaming at the Headworks to the WWTP; and the need at times for OWSB to sequester all or a portion of Defendant's discharge from the normal treatment train at the WWTP.

16. WHEREAS, ADEM issued Defendant SID Permit No. IU350801146, which was effective July 1, 2012.¹

17. WHEREAS, the EPA and ADEM conducted inspections at both OWSB's POTW and Defendant's Facility in November 2012. ADEM sent a Notice of Violation ("NOV") letter to Defendant dated December 13, 2012.

¹ The SID Permit expired on June 30, 2017. However, Defendant made a timely and complete application to ADEM for renewal of its SID Permit on or about December 19, 2016. ADEM is currently processing Defendant's application for renewal of the Permit. Until a new Permit is issued, the requirements of Defendant's July 1, 2012 Permit are applicable to its operations, pursuant to Ala. Admin. Code r. 335-6-5-.11.

18. WHEREAS, the EPA issued Defendant an Administrative Order, Docket No. CWA-04-2013-4756 (“EPA AO”), effective April 29, 2013, which required Defendant to, inter alia: install pretreatment equipment to control the discharge from the Facility to the POTW to meet the maximum standard of 600 milligram per liter (“mg/L”) for TSS on or before June 1, 2013; install pretreatment equipment to control the discharge from the Facility to the POTW to meet the temperature and pH limitations identified in the SID Permit on or before December 1, 2013; install and calibrate equipment to monitor and report flow from the Facility to the POTW, and commence using that flow equipment to report flow to ADEM on or before June 1, 2013; maintain full compliance with monitoring and reporting requirements of the SID Permit; and submit a status report of Defendant’s compliance with the terms of the EPA AO to the EPA beginning on June 1, 2013, and every June 1 and December 1 thereafter for the term of the EPA AO.

19. WHEREAS, Defendant completed timely installation of the pollution control equipment to manage TSS, temperature, and pH, and also timely installed the flow monitoring system.

20. WHEREAS, Plaintiffs allege that, despite installing the required pollution control equipment, Defendant’s discharge from the Facility has caused or contributed to interference and/or pass-through at OWSB’s POTW.

21. WHEREAS, Defendant entered into Consent Order No. 13-145-CWP with ADEM on September 16, 2013 (“ADEM CO”), which required Defendant to, inter alia, fully comply with the SID Permit limitation for temperature without the use of non-process water for dilution and/or without the use of increased process water for dilution.

22. WHEREAS, the Complaint against Defendant alleges that Defendant violated the CWA, 33 U.S.C. § 1317(d), by:

- a. Discharging wastewater without a valid SID Permit from 2007 until June 30, 2012;
- b. Causing or contributing to interference at the POTW;
- c. Causing or contributing to pass-through at the POTW;
- d. Discharging pollutants to the POTW with pH levels lower than 5.0 standard units on at least four (4) occasions between 2007 and June 30, 2012;
- e. Discharging pollutants to the POTW at temperatures higher than 104 °F on at least fifty-seven (57) occasions between 2007 and June 30, 2012;
- f. Failing to install and have in operating condition all pollution control equipment required to meet applicable Pretreatment Standards prior to beginning discharge to the POTW;
- g. Failing to submit to ADEM, and maintain records of, certain required reports of its compliance with categorical Pretreatment Standards on at least ten (10) occasions;
- h. Failing to comply with requirements of its SID Permit, No. IU350801146 in the following manners: at least 644 effluent limit violations; over 1,100 instances of failing to fully and accurately monitor and/or report its wastewater discharges; and failing to timely submit required discharge monitoring reports (“DMRs”) on at least twenty-two (22) occasions; and

i. Failing to fully comply with the EPA AO by: failing to submit timely status reports to the EPA on at least seven (7) occasions; and by failing to use the installed flow monitoring equipment to report flow.

23. WHEREAS, Defendant has undertaken several investigations regarding its wastewater. In addition, Defendant has evaluated, installed, and is operating a grinder pump at the Highway 202 Lift Station.

24. WHEREAS, Defendant's agreement to this Consent Decree is not an admission of liability to the United States or the State arising out of the transactions or occurrences alleged in the Complaint, except for its consent to the jurisdiction and venue as provided in Section II (Jurisdiction and Venue) of this Consent Decree, nor is it an adjudication or admission of any fact or law.

25. WHEREAS, the Parties stipulate that settlement of Plaintiffs' claims in accordance with the terms of this Consent Decree is in the public interest and have agreed to entry of this Consent Decree without trial of any issues, and the Parties hereby stipulate that, in order to resolve these claims stated in the Plaintiffs' complaint, this Consent Decree should be entered.

26. WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, in consideration of the recitals and alleged violations described above and in the interest of settling all civil claims and controversies before the taking of any testimony, without the adjudication or admission of any issue of fact or

law except as provided in Section II, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

II. JURISDICTION AND VENUE

27. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367(a).

28. Venue is proper in the Northern District of Alabama pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1395(a) (Fine, penalty or forfeiture), and pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), because it is the judicial district where the Defendant is located, where a substantial part of the events or omissions giving rise to the claims occurred, and where the alleged violations occurred.

29. For purposes of this Consent Decree, or any action to enforce this Consent Decree, Defendant consents to the Court's jurisdiction over this Consent Decree and any such action and over Defendant and consents to venue in this judicial district.

30. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 309(b) and (d) of the CWA, 33 U.S.C. § 1319(b) and (d), and Section 22-22A-5(18)b. of the AEMA.

III. APPLICABILITY

31. The obligations of this Consent Decree apply to and are binding upon the United States and ADEM, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

32. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of this Consent Decree are implemented. At least thirty (30) Days prior to such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to the United States Attorney for the Northern District of Alabama, the United States Department of Justice, EPA Region 4, and ADEM, in accordance with Section XVIII (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Consent Decree.

33. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any contractor retained to perform work required under this Consent Decree. Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

34. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

IV. OBJECTIVE

35. The objective of this Consent Decree is for Defendant to eliminate discharge of Objectionable Solids into the POTW, and to achieve and maintain full compliance with the CWA, the AWPCA, and the SID Permit.

V. DEFINITIONS

36. Headings are provided for convenience only. Terms used in this Consent Decree that are defined in the CWA, the AWPCA, or the AEMA, or in regulations promulgated pursuant to the CWA, the AWPCA, or the AEMA shall have the meanings assigned to them in those acts or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. “ADEM” shall mean the Alabama Department of Environmental Management.
- b. “ADEM CO” shall mean Consent Order No. 13-145-CWP issued to Defendant by ADEM on September 16, 2013.
- c. “Best Management Practices” or “BMPs” means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 C.F.R. § 403.5(a)(1) and (b). BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.
- d. “Calendar Year” shall mean the twelve (12) month period starting on January 1 and ending on December 31.
- e. “Certification” or “Certify,” when used in this Consent Decree, shall require Defendant to comply with Paragraph 48 of this Consent Decree.
- f. “Complaint” shall mean the complaint filed by the United States and ADEM in this action.

g. “Compliance Standards” shall mean the General Pretreatment Regulations for Existing and New Sources of Pollution (the “General Pretreatment Regulations”) at 40 C.F.R. Part 403, including the requirements to not cause or contribute to Pass-Through and/or Interference at the POTW; the Categorical Pretreatment Standards for New Sources for the Mechanical Pulp Subcategory (“PSNS”) at 40 C.F.R. § 430.77; the requirements of the SID Permit; and local limits established and incorporated in a future or modified SID Permit.

h. “Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto (listed in Section XXVII).

i. “CWA” shall mean the Clean Water Act, as amended, 33 U.S.C. §§ 1251 et seq.

j. “Date of Entry” shall mean the date on which this Consent Decree is entered by the United States District Court for the Northern District of Alabama.

k. “Date of Lodging” shall mean the date on which this Consent Decree is lodged with the Clerk of the Court for the United States District Court for the Northern District of Alabama.

l. “Day” (whether or not capitalized) shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next business day.

- m. “Defendant” shall mean Kronospan, LLC, and any successor and assign thereto.
- n. “Deliverable” shall mean any written document required to be prepared and/or submitted by or on behalf of Defendant pursuant to this Consent Decree.
- o. “Discharge” or “Indirect Discharge” (whether or not capitalized) shall mean the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the CWA.
- p. “Discharge Limit Violation” shall mean: (i) any exceedance of Discharge Limitations set forth in Part I.A of the SID Permit; (ii) any violation of the Specific Prohibitions in 40 C.F.R § 403.5(b), other than Pass-Through or Interference, as determined by sampling required by the SID Permit or sampling conducted by OWSB, the EPA, ADEM, or the Third-Party Team.
- q. “EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.
- r. “EPA AO” shall mean Administrative Order, Docket No. CWA-04-2013-4756 (“EPA AO”) issued by the EPA to Defendant, effective April 29, 2013.
- s. “Effective Date” shall have the definition provided in Section XIX.
- t. “Facility” shall mean Defendant’s integrated pulp and fiberboard mill located at 1 Kronospan Way, Eastaboga, Calhoun County, Alabama.
- u. “Highway 202 Lift Station” shall mean the OWSB pump station located approximately 400 feet west of Bridgewater Interiors on the south side of Bynum Boulevard in Eastaboga, Alabama, at the following global positioning system coordinates: N 33.60685, W 85.98864.

v. “Interference” shall mean a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both: (i) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and (ii) therefore is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the statutory provisions and regulations or permits issued thereunder. 40 C.F.R. § 403.3(k).

w. “Kronospan Sample Preparation Technique” shall mean the use of an electric hand blender to obtain homogeneity in lieu of a magnetic stirrer, where mixing is specified in an approved analytical method under 40 C.F.R. Part 136.²

x. “Month” shall mean one calendar month running from the numbered day to the same numbered day of the following calendar month, regardless of whether the month has 28, 29, 30, or 31 days. In the case where a triggered event would occur on a day of the month which does not exist (e.g., February 30), then the event shall be due on the first day of the following month (e.g., March 1).

y. “NPDES” shall mean National Pollutant Discharge Elimination System, as established by 33 U.S.C. § 1342.

z. “NPDES Permit” shall mean NPDES Permit No. AL0058408, issued by ADEM to OWSB, effective on September 1, 2013, and expiring on August 31, 2018;

² Due to the sample matrix when Objectionable Solids are present, OWSB has found this technique necessary to properly prepare wastewater introduced by Defendant to the POTW for analysis.

- aa. “Objectionable Solids” or “Solids” shall mean thin, fabric-like material having a high plasticity, tan-colored appearance, slippery texture, and sweet odor. This material demonstrates an ability to accumulate upon itself and other objects at the Highway 202 Lift Station and elsewhere within the sewer system, and to fragmentize when limited force is applied, contributing problematic suspended solids loading to wastewater;
- bb. “OWSB” shall mean the Oxford Water Works and Sewer Board;
- cc. “Paragraph” shall mean a portion of this Decree identified by an Arabic numeral;
- dd. “Parties” shall mean the United States, ADEM, and Defendant;
- ee. “Pass-Through” shall mean a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
- ff. “POTW” shall mean the OWSB’s publicly-owned treatment works, including the Tull C. Allen Wastewater Treatment Plant and all transmission equipment appurtenant thereto.
- gg. “Quarter” or “Quarterly” shall mean calendar quarters (i.e., three-month periods from January 1 to March 31; from April 1 to June 30; from July 1 to September 30; and from October 1 to December 31).
- hh. “Responsible Corporate Officer” shall mean: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business

function, or any other person who performs similar policy- or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

ii. “Sampling Evaluation and Performance Audit Inspection Report” shall mean the report prepared by the EPA’s Science and Ecosystem Support Division, pursuant to an inspection of the POTW conducted on March 28 and 29, 2017, attached hereto as Appendix A.

jj. “Section” shall mean a portion of this Decree identified by a Roman numeral;

kk. “SID Permit” shall mean the version of State Indirect Discharge Permit No. IU350801146 effective as of the Date of Lodging of this Consent Decree.

ll. “State” shall mean the State of Alabama, including all its departments, agencies, and instrumentalities, and any successor departments, agencies, and instrumentalities;

mm. “Subparagraph” shall mean a portion of a Paragraph identified by lowercase letters.

nn. “Third-Party” or “Third-Party Team” shall mean the independent, third-party inspection team retained by Defendant and meeting the requirements for independence outlined in Section IX of this Consent Decree.

oo. “Timely,” when applied to the submittal of a Deliverable, shall mean submitted no later than the deadline established in this Consent Decree (or in a document approved pursuant to this Consent Decree) and containing all of the elements pertaining to the submittal as set forth in this Consent Decree (or in a document approved pursuant to this Consent Decree). “Timely,” when applied to the implementation of any Work, shall mean implemented no later than the deadline established in this Consent Decree (or in a document approved pursuant to this Consent Decree) and in accordance with the elements pertaining to such Work as set forth in this Consent Decree (or in a document approved pursuant to this Consent Decree).

pp. “United States” shall mean the United States of America, acting on behalf of EPA.

qq. “Work” shall mean all activities Defendant is required to perform under this Consent Decree.

VI. CIVIL PENALTY

37. No later than thirty (30) Days after the Effective Date of this Consent Decree, Defendant shall pay the sum of \$450,000 (four-hundred and fifty thousand dollars) as a civil penalty, together with interest accruing from the date on which the

Consent Decree is lodged with the Court, to the United States, at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging.

a. Defendant shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to Defendant by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Northern District of Alabama after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Anthony Athienitis
One Kronospan Way
Eastaboga, Alabama 36260
Tel: (256) 741-8757
Email: aathienitis@kronospanusa.com

on behalf of Defendant. Defendant may change the individual to receive payment instructions on its behalf by providing written notice of such change to the United States and EPA in accordance with Section XVIII (Notices).

b. At the time of payment, Defendant shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to the United States via email or regular mail in accordance with Section XVIII; and (iii) to EPA in accordance with Section XVIII. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States et al. v. Kronospan, LLC

and shall reference the civil action number, CDCS Number and DOJ case number 90-5-1-1-10934.

38. No later than thirty (30) Days after the Effective Date, Defendant shall pay a civil penalty of \$450,000 (four-hundred and fifty thousand dollars) to ADEM. The payment to ADEM shall be made by corporate check payable to: "Alabama Department of Environmental Management" and delivered to:

Alabama Department of Environmental Management
Montgomery Office
ATTN: Office of General Counsel
1400 Coliseum Boulevard
Montgomery, AL 36110-2400

39. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section XII (Stipulated Penalties) in calculating its federal, State, or local income tax.

VII. REVIEW, APPROVAL, AND IMPLEMENTATION OF DELIVERABLES

40. This Section applies to all Deliverables required under this Consent Decree.

41. EPA Action on Deliverables. After review of any Deliverable that is required to be submitted pursuant to this Consent Decree, the EPA, after consultation with ADEM, shall in writing:

- a. approve the submission;
- b. approve the submission upon specified conditions;
- c. approve part of the submission and disapprove the remainder; or
- d. disapprove the submission.

42. Approved Deliverables. If the submission is approved pursuant to Subparagraph 41.a, Defendant shall take all actions required by the Deliverable in accordance with the schedules and requirements of the Deliverable as approved. If the submission is conditionally approved or approved only in part, pursuant to Subparagraphs 41.b or 41.c, Defendant shall, upon written direction from the EPA, after consultation with ADEM, take all actions required by the approved plan, report, or other item that the EPA, after consultation with ADEM, determines are technically severable from any disapproved portions, subject to Defendant's right to dispute only the specified conditions or the disapproved portions under Section XIV of this Decree (Dispute Resolution). Following EPA approval of any Deliverable or portion thereof, such Deliverable or portion thereof so approved shall be incorporated into and become enforceable under this Consent Decree.

43. Disapproved Deliverables. If the submission is disapproved in whole or in part pursuant to Subparagraphs 41.c or 41.d, subject to Defendant's right to dispute only the specified conditions or the disapproved portions under Section XIV of this Consent Decree (Dispute Resolution), Defendant shall, within fourteen (14) Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit to the EPA and ADEM the Deliverable, or disapproved portion thereof, for approval, in

accordance with the Paragraphs 41 and 42. If the resubmission is approved in whole or in part, Defendant shall proceed in accordance with the Paragraph 42.

44. Stipulated Penalties Accruing. Subject to Defendant's right to dispute only the specified conditions or the disapproved portions under Section XIV of this Consent Decree (Dispute Resolution), any stipulated penalties applicable to the original Deliverable, as provided in Section XII of this Consent Decree (Stipulated Penalties), shall accrue during the fourteen (14)-Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Defendant's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

45. Resubmitted Deliverable. If a resubmitted Deliverable, or portion thereof, is disapproved in whole or in part, the EPA, after consultation with ADEM, may again require Defendant to correct any deficiencies, in accordance with Paragraph 43, or may itself/themselves correct any deficiencies, subject to Defendant's right to invoke Dispute Resolution pursuant to Section XIV of this Consent Decree (Dispute Resolution) and the right of the EPA, in consultation with ADEM, to seek stipulated penalties as provided in the Paragraph 44. Upon the EPA's correction, in consultation with ADEM, of any deficiencies, such resubmitted Deliverable or portion thereof shall be incorporated into and become enforceable under this Consent Decree and shall be implemented by Defendant according to the approved schedule, subject to Defendant's

right to invoke Dispute Resolution pursuant to Section XIV of this Consent Decree (Dispute Resolution).

46. Timing of Review of Deliverables. The EPA and ADEM agree to use best efforts to expeditiously review and comment on all Deliverables required pursuant to this Consent Decree. If the EPA issues written comments and decisions on any Deliverable more than sixty (60) Days after receipt of such submission, any subsequent deadline or milestone that is dependent upon such comments or decisions shall be extended. The length of the extension shall be determined by calculating the number of Days between the EPA's receipt of the submission and the date of the EPA's written response, less sixty (60) Days. Within thirty (30) Days of the date that Defendant knows or should know of a deadline or milestone that Defendant believes is extended under this Paragraph, Defendant shall inform the EPA and ADEM, in writing, of its belief and the amount of time Defendant believes the deadlines or milestones are extended. If the EPA disagrees, after consultation with ADEM, with Defendant's determination that a deadline is dependent upon such comments or decisions, the EPA, after consultation with ADEM, shall inform Defendant in writing. Defendant may dispute the EPA's conclusion regarding whether a deadline is dependent upon such comments or decisions pursuant to Section XIV of this Consent Decree (Dispute Resolution).

47. The Parties recognize that Defendant may need or want to revise certain Deliverables submitted pursuant to this Consent Decree during the term of this Consent Decree. Such revisions shall not be considered modifications to the Consent Decree for purposes of Section XXI of this Consent Decree (Modification). Defendant must obtain the EPA's prior written approval of any revision to the substance of any Deliverable

submitted pursuant to this Consent Decree. Defendant may revise the form, but not substance, of any Deliverable submitted pursuant to this Consent Decree without consulting the EPA. Defendant shall provide copies of any such revised Deliverable to the EPA and ADEM within seven (7) Days after making such revision.

48. Certification. In all Deliverables, notices, documents, or reports required to be submitted to the United States and ADEM pursuant to this Consent Decree, Defendant shall, by a Responsible Corporate Officer, sign and certify such Deliverables, notices, documents, or reports as follows:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This Certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

VIII. COMPLIANCE REQUIREMENTS

49. This Consent Decree in no way affects or relieves Defendant of its obligation to comply with applicable federal, State, and local laws, regulations, and permits, including its SID Permit.

50. At all times, Defendant shall operate the Facility to achieve compliance with all applicable federal, State, and local environmental laws, including, without limitation, the Compliance Standards and other applicable permits, approvals, regulations, or requirements.

51. Defendant shall perform the Work required by this Consent Decree in compliance with the requirements of all federal, State, and local laws, regulations, and permits. This Consent Decree is not a permit issued pursuant to any federal, State, or local statute or regulation.

52. Permits. Where any compliance obligation under this Section or Section IX (Work to be Performed) requires Defendant to obtain a federal, State, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendant may seek relief under the provisions of Section XIII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

53. Pursuant to the authorities of Sections 309(a) of the CWA, 33 U.S.C. § 1319(a), and the AWPCA, Ala. Code. § 22-22-1 et seq., Defendant hereby consents to the performance of the Work as described in Section IX of this Consent Decree.

IX. WORK TO BE PERFORMED

54. Objectionable Solids Identification and Removal.

a. Objectionable Solids Identification Plan.

i. Within ninety (90) Days after the Effective Date of this Consent Decree, Defendant shall submit an "Objectionable Solids

Identification Plan” to the EPA and ADEM for review and approval.

- ii. The purpose of the Objectionable Solids Identification Plan is to prepare a methodology for identifying the origins of the Objectionable Solids found in the Facility’s combined process and/or non-process wastewater streams being discharged into the POTW, which the EPA and ADEM deem to be causing or contributing to Interference and/or Pass-Through.
- iii. The Objectionable Solids Identification Plan shall detail the Defendant’s step-wise actions and timeframes for performing an in-depth diagnostic evaluation of all wastewater streams discharging from the Facility to identify the pollutant loadings and the mechanisms leading to the formation and discharge of the Objectionable Solids. This Plan shall incorporate, at a minimum:
 - (a) Methodology for obtaining a current analysis of both process and non-process (e.g., sanitary, stormwater, cooling water) wastewater streams, regardless of whether they are normally monitored, to contemporaneously identify the pollutants present that might be contributory to Objectionable Solids formation, the contributing flow rates, and the equivalent pollutant loadings (mass or concentration) in each wastewater stream. Preparation of process samples for analyses that

contain solids shall employ the Kronospan Sample Preparation Procedure in Subparagraph 36.w;

(b) Methodology for evaluating the pollution control equipment or measures (e.g., best management practices) currently in-place for each wastewater stream, and the estimated or actualized pollutant reductions that each one achieves;

(c) Methodology for evaluating the chemical interactions between pollutants in each source wastewater stream, as well as following points where a wastewater stream combines with other wastewater streams from the Defendant prior to entering the POTW system. The intent of this effort will be to identify if the Objectionable Solids are being formed as a chemical intermediate and the mechanism for it; and

(d) An implementation schedule for applying these methodologies that identifies dates for both intermediate steps and completion of the diagnostic evaluation, as well as a date for the submittal of the resulting Objectionable Solids Report and Objectionable Solids Remedial Plan identified in Subparagraphs 54.b. and c. below. The schedule for submittal of the Objectionable Solids Report shall not exceed ninety (90)

Days from the approval of the Objectionable Solids Identification Plan, and the schedule for submittal of the Objectionable Solids Remedial Plan shall not exceed one hundred twenty (120) Days from the approval of the Objectionable Solids Report.

iv. Upon Defendant's receipt of any comments by the EPA, in consultation with ADEM, pursuant to their review under Section VII (Review, Approval, and Implementation of Deliverables), Defendant shall make any changes to the Objectionable Solids Identification Plan in accordance with their comments and instruction.

v. Upon approval of the Objectionable Solids Identification Plan by the EPA, in consultation with ADEM, Defendant shall fully implement such Plan in accordance with the methodologies and schedule of implementation contained therein.

b. Objectionable Solids Report. In accordance with the implementation schedule contained in the approved Objectionable Solids Identification Plan, Defendant shall timely submit an "Objectionable Solids Report" to the EPA and ADEM for review and approval. The Objectionable Solids Report shall, at a minimum, include:

i. A summary of the findings resulting from implementation of the Objectionable Solids Identification Plan, including the identified source(s) of the Objectionable Solids, if any;

- ii. Descriptive photographs, with captions, documenting implementation of the Objectionable Solids Identification Plan; and
 - iii. Tabulations of the analytical data (supplied both in hard copy and digitally as manipulatable spreadsheets) collected and analyzed during implementation of the Objectionable Solids Identification Plan, clearly identifying the waste stream(s) monitored, sampling locations (description or supplied drawing references), 40 C.F.R. Part 136 analytical methods used (and confirming sample preparation step indicated in Subparagraph 53.a.iii.(a). above), analytical results, and units of measurement.
- c. Objectionable Solids Remedial Plan.
- i. If the Objectionable Solids Report identifies sources of Objectionable Solids, in accordance with the implementation schedule contained in the approved Objectionable Solids Identification Plan, Defendant shall timely submit an “Objectionable Solids Remedial Plan” to the EPA and ADEM for review and approval. The Objectionable Solids Remedial Plan shall, at a minimum, include specific remedial plans which will either prevent any Objectionable Solids from forming in the Facility’s wastewater discharge, or to remove any entrained Solids. These specific plans may take either an immediate or phased approach. This “Remedial Plan” shall include, at a minimum:

- (a) Descriptions of the actions necessary to prevent formation and/or discharge of the Objectionable Solids to the POTW by Defendant, including, as appropriate, optimization of existing treatment systems and best management practices, any new pollution control equipment and/or best management practices, and their applicable locations;
- (b) Schedule(s) of implementation and/or construction to effect the actions necessary to prevent the formation and/or discharge of Objectionable Solids to the POTW by Defendant, which are not to exceed one hundred eighty (180) Days from the Day of the EPA's approval of the Remedial Plan under Section VII;
- (c) Schedule(s) of implementation to submit necessary complete applications, including any required letter of acceptance from the POTW, for any new or modified State permits necessary to implement the Objectionable Solids Remedial Plan and to ensure the Facility's discharge into the POTW is being monitored at locations appropriate for the types of pretreatment standards applied; and
- (d) The Third-Party Retention Plan identified in Subparagraph 54.d below.

ii. Within thirty (30) Days of completion of all aspects of the Remedial Plan, Defendant shall submit certification to the EPA and ADEM that it has fully completed implementation of the Remedial Plan, and that the finalized Audit contract, approved pursuant to Subparagraph 53.d.iv below, is now engaged.

d. Third-Party Verification of Effective Objectionable Solids Removal.

i. Pursuant to Subparagraph 54.c.i.(d) above, Defendant shall submit a “Third-Party Retention Plan” for approval under Section VI that will engage a Third-Party audit of Defendant’s discharge (“Audit”) upon completion of the approved Remedial Plan schedule.

ii. The Third-Party Retention Plan shall include, at a minimum:

(a) Description of the Third-Party’s qualifications, including how the Third-Party meets each of the following required criteria:

(1) No representative of the Third-Party shall receive compensation or financial benefit from Defendant based on the outcome of the Audit, apart from payment for the Audit as performed pursuant to this Consent Decree;

(2) No representative of the Third Party shall have performed work for Defendant prior to the contract between Defendant and the Third-Party for the Audit;

(3) Third Party representatives involved in the Audit shall be knowledgeable of the federal, state, and local compliance standards applicable to the tasks they will perform;

(4) Third Party representatives leading the Audit shall have empirical knowledge of the type of manufacturing operations performed by Defendant, as well as the recognized and generally-accepted environmental management practices applicable to Defendant's type of facility; and

(5) Third Party representatives leading the Audit shall have received prior training in the techniques necessary to perform an audit of industrial wastewater and its impacts on a POTW.

(b) A conflict of interest statement, signed and dated by all representatives of the Third-Party to be involved in the Audit,

verifying their eligibility to perform the Audit under the terms of this Consent Decree; and

(c) A copy of the draft Third-Party contract, which shall include, at a minimum:

(1) The intended timeframes for Audit planning, implementation, and reporting, which shall begin within fourteen (14) Days of the Defendant's transmittal of the certified completion of its Remedial Plan to the EPA and ADEM;

(2) Provision of copies of the approved Objectionable Solids Report and Remedial Plan and the Sampling Evaluation and Performance Audit Inspection Report to the Third-Party by Defendant;

(3) The contract's deliverable, which shall be submittal of a "Verification Report" to Defendant, EPA, and ADEM within sixty (60) Days of Third-Party's completion of the screening events described in Subparagraph 54.d.ii(c)(4)1.i(v), as specified in Subparagraph 54.d.vi below; and

(4) The scope of the Audit work, which shall include, at a minimum:

(i) A primary objective to verify that Objectionable Solids have been effectively removed, supported by documented visual inspections collected at the Defendant's Facility as well as multiple points within the POTW system;

(ii) Requirement for Defendant to supply the Third Party with forecasts for daily production during the term of the contract;

(iii) Requirement that activities within the POTW system must first obtain approval from OWSB;

(iv) Requirement that the Third-Party visually inspect Defendant's Facility to verify that all necessary pollution control equipment and/or best management practices have been properly installed and are operating in accordance with design specifications; and

(v) Requirement that the Third-Party shall, at a minimum, perform a series of three (3) screening and visual inspection events as described below, with an allowance that the Third-Party, in its sole discretion, may select more events or manhole

locations if deemed necessary to meet the primary objective.

(a) Event Locations. Each event shall include concurrent activity at the Highway 202 Lift Station and two specific OWSB manholes, which are numbers M-21-018 and M-21-016, on a 10-inch sewer segment that only receives flow from the Defendant's Facility. The interval between each event shall be at least one (1) calendar month apart, and at a time when the Third-Party is aware the Defendant's Facility:

(i) has been at full production for at least eight (8) Days prior to the beginning of the screening period, and will remain so for the duration of the event; and (ii) has not discharged from a Facility cleaning cycle in the last thirty (30) Days that could scour the receiving sewer.

(b) Event Description. Each event shall meet the following criteria:

i. *Screen design*. Each screen shall cover the bottom two-thirds ($2/3$) of the pipe opening that supplies flow into the selected manhole. The screens must be

uncoated to improve adhesion. The screen opening size selected by the Third-Party will correspond to the average flow rate, but in no case be larger than one (1) square inch. A valid event requires that the screens stay flush to the pipe opening, remaining functional for the duration of the activity without short-circuiting.

ii. *Screening Duration.* A clean screen inserted into the manhole shall remain in place for at least a 24-hour period prior to visual inspection, but may remain in place for a longer duration at the discretion of the Third Party and with approval from OWSB.

iii. *Visual Inspection.* At the end of the event, the Third-Party shall inspect the wet well at the Highway 202 Lift Station for signs of Objectionable Solids prior to removing each emplaced manhole screen. Manhole screens shall be removed sequentially in an upstream direction to visually inspect each screen and supply

pipe for signs of Objectionable Solids accumulation. Each event shall include concurrently narrated and photo-documented visuals of the Highway 202 Lift Station wet well and the manhole interiors and appurtenances.

iii. Upon Defendant's receipt of any comments by the EPA and ADEM pursuant to their review under Section VII (Review, Approval, and Implementation of Deliverables), Defendant shall make any changes to the Third-Party Retention Plan in accordance with their comments and instruction.

iv. Upon approval of the Third-Party Retention Plan by the EPA, in consultation with ADEM, Defendant shall finalize the draft contract contained therein.

v. Defendant may not hire, as employees, consultants, or contractors, any representatives of the Third-Party for a period of two years following the submission of the Verification Report.

vi. The Verification Report produced solely and independently by the Third Party shall, at a minimum, include:

- (a) A copy of the finalized contract with the Defendant, including the terms for the Audit;
- (b) Identification of the individuals conducting the Audit, and any other key persons participating in the

Audit, including names, titles, and summaries of qualifications;

- (c) Narrative observations and descriptive photographs with captions concerning the detected presence, or potential for the presence, of Objectionable Solids at Defendant's Facility, at manholes, at the Highway 202 Lift Station, or otherwise within the POTW system; as well as the impact of such Solids on the functionality POTW appurtenances, or Facility equipment;
- (d) Other information documenting implementation of the Audit and the conclusions of the Verification Report;
- (e) Information pertaining to the production rate at the Facility for the eight (8) Days prior to the screening and visual inspection events;
- (f) Tabulations (supplied in both hard copy and digitally) of any analytical data collected and analyzed during implementation of the Audit, clearly identifying the: waste stream monitored, sampling location(s) (description and spatial drawing reference), pollutant parameter, 40 C.F.R. Part 136 analytical method, analytical result, and units of measurement;
- (g) Narrative conclusions, including recommendations of any additional pollution control equipment and/or best

management practices that would be effective at either preventing the formation of Objectionable Solids or removing Objectionable Solids from the Facility discharge to the POTW, in the event the Third-Party concludes such Solids are either still present to any degree or still have the potential to form; and

(h) The following certification, signed and dated by the supervising manager for the Third-Party:

I certify that this compliance audit report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information upon which the audit is based. I further certify that the audit was conducted, and this report was prepared pursuant to all applicable auditing, competency, independence, impartiality, and conflict of interest standards and protocols. Based on my personal knowledge and experience, the inquiry of personnel involved in the audit, the information submitted herein is true, accurate, and complete. I am aware that there are significant penalties for making false material statements, representations, or certifications, including the possibility of fines and imprisonment for knowing violations.

e. Supplemental Objectionable Solids Remedial Plan.

i. If the Third-Party's Verification Report finds that Objectionable Solids are still present or otherwise still have credible potential to appear in the Facility's discharge to the POTW, then within sixty (60) Days, Defendant shall submit to the EPA and ADEM for review and approval a "Supplemental Objectionable Solids Remedial Plan," including a schedule of

implementation, not to exceed ninety (90) Days from approval of the Supplemental Objectionable Solids Remedial Plan by EPA and ADEM, to implement any recommended additional pollution control equipment and/or best management practices recommended by the Third-Party.

- ii. The Supplemental Objectionable Solids Remedial Plan shall also include a draft contract between Defendant and Third-Party for another independent audit to verify that the Objectionable Solids have been effectively removed from the Facility's discharge. The process of planning, implementation, and reporting for this "Supplemental Audit" shall proceed according to the same provisions for the first Audit, as presented above in Subparagraph 54.d.
- iii. Within thirty (30) Days of completion of all aspects of the Supplemental Objectionable Solids Remedial Plan, Defendant shall submit certification to the EPA and ADEM that it has completed implementation of the Plan, and that the finalized Supplemental Audit contract, approved pursuant to Subparagraph 54.d.iv above, is now engaged.
- iv. In the event observations of Objectionable Solids are made during a Supplemental Audit, Defendant shall implement another Supplemental Objectionable Solids Remedial Plan, following the same stepwise approach outlined in Subparagraphs

1.1.e above, until the Third-Party certifies that such Solids are not present to any degree or do not have the potential to form Objectionable Solids. Continued observations of Objectionable Solids and/or the credible potential for formation of such Objectionable Solids may be considered pass-through or interference subject to the assessment of stipulated penalties under Section XII.

55. Standard Operating Procedure for Flow Reporting.

- a. Within ninety (90) Days of the Effective Date of this Consent Decree, Defendant shall prepare and submit for EPA and ADEM review and approval a Standard Operating Procedure for Flow Reporting (“SOP”).
- b. The SOP shall detail the stepwise methodology that the Defendant employs to accurately collect flow data from the Facility’s flow metering equipment, and to accurately report it to ADEM pursuant to the terms of the Defendant’s SID Permit.
- c. If, at any time during the term of this Consent Decree, the methodology in the approved SOP needs to be modified, then Defendant shall propose such modification to the EPA and ADEM under Section VI for review and approval.

56. Slug Discharge Control Plan.

- a. Within one-hundred and eighty (180) Days of the Effective Date of this Consent Decree, Defendant shall prepare and submit for EPA and

ADEM review and approval an accidental and slug discharge control plan (“Slug Discharge Control Plan”).

b. The Slug Discharge Control Plan shall describe the Facility’s procedures to prevent a non-routine, episodic type of discharge to the POTW, including, but not limited to, an accidental spill or a non-customary batch discharge, which has reasonable potential to cause or contribute to Interference and/or Pass-Through, or in any other way violate the Compliance Standards.

c. The Slug Discharge Control Plan submitted to EPA and ADEM shall be developed pursuant to the EPA Office of Water’s Control of Slug Loadings to POTW Guidance Manual (Feb. 1991), and sufficiently address all eight (8) of the components identified in Section 2.3.4 of that manual.

57. Pretreatment Compliance Training Program.

a. Within ninety (90) Days after the Third-Party’s submittal of the Verification Report for the Audit to Defendant, EPA and ADEM, or, if required under Subparagraph 54.e, submittal of the Verification Report for the Second Audit, Defendant shall submit to the EPA and ADEM for review and approval an Implementation Plan for the Pretreatment Compliance Training Program (“Training Program”). This submittal shall include the job titles identified for training, course syllabi, and the daily agendas for training course(s), as well as the calendar for the initial and first two annual refresher trainings.

b. Training materials supplied in the Defendant's Training Program shall include, at a minimum, an in-depth review of the following

components:

- i. Operating instructions for all pollution control equipment and best management practices designed to achieve compliance with the Compliance Standards, whether such equipment and best management practices were installed pursuant to this Consent Decree or were previously installed. Information should include, as appropriate: equipment manuals; cut sheets; specifications; chemical dosing instructions; material safety data sheets (MSDS) for chemicals; and proper storage and handling for chemicals;
- ii. Requirements and procedures for notification of the EPA, ADEM, and/or OWSB under the terms of this Consent Decree and/or the Compliance Standards, including contact names, phone numbers, reporting time-frames, and any standard forms required to be used for reporting;
- iii. SID Permit limitations and requirements, including sampling and reporting requirements;
- iv. Flow Reporting SOP;
- v. Slug Discharge Control Plan;
- vi. The terms and conditions of this Consent Decree.

c. The Training Program shall be conducted on the following frequencies for the duration of this Consent Decree:

i. Initial Training. Within ninety (90) Days after the EPA's approval of the Training Program in consultation with ADEM, Defendant shall conduct an initial training on the components listed in Subparagraph 57.b for all Defendant's employees, contractors, consultants, and other personnel charged with the installation, operation, and/or maintenance of pollution control equipment and/or best management practices to achieve Compliance Standards, as well as any employees, contractors, consultants, and other personnel responsible for sampling or reporting obligations under the terms of this Consent Decree, the SID Permit, or any other Compliance Standard.

ii. Annual Refresher Training. Defendant shall conduct an Annual Refresher Training for all employees, contractors, consultants, and other personnel identified in the Training Program once per year submitted pursuant to Subparagraph 57.b above. The Annual Refresher Training may be an abbreviated version of the Initial Training; however, to the extent that Defendant implements any modifications or changes to its processes; pollution control equipment; best management practices; sampling methodology, frequency, or locations; or any other component of the Training Program, Defendant shall repeat a full Initial Training for the impacted components.

- iii. New Employee Training. Any employee, contractor, consultant, or other personnel charged with the installation, operation, and/or maintenance of pollution control equipment and/or best management practices to achieve Compliance Standards, as well as any employees, contractors, consultants, and other personnel responsible for sampling or reporting obligations under the terms of this Consent Decree, the SID Permit, or any other Compliance Standard, who is retained by Defendant after the Initial Training has been completed shall receive the full Initial Training within ninety (90) Days of such person's start date for employment.
- d. Post-SEP-Implementation Training. Within ninety (90) Days of the United States' notification to the Defendant that Defendant has satisfactorily completed the SEP outlined in Section X, Defendant shall submit to the EPA and ADEM for review and approval any modifications to its Training Program necessary to reflect modifications or changes to its processes; pollution control equipment; best management practices; sampling methodology, frequency, or locations as a result of Defendant's implementation of the SEP. If no such modifications to the Training Program are necessary, Defendant shall provide certification that no modifications are required.
- e. Defendant shall submit the names, titles, and responsibilities of each person receiving Initial Training, Annual Refresher Training, or

New Employee Training, along with the dates of each training provided, to the EPA and ADEM in its Quarterly Compliance Reports, as required under Section XI (Sampling and Reporting Requirements).

X. SUPPLEMENTAL ENVIRONMENTAL PROJECT

58. Defendant shall implement a Supplemental Environmental Project (“SEP”), to install an evaporation system to reduce the frequency and total annual volume of process wastewater currently being treated by the Facility’s pretreatment system and discharged to the POTW, in accordance with all provisions of Appendix B. The SEP shall be completed in accordance with the schedule set forth in Appendix B, but no later than seven-hundred and ninety (790) Days from the Effective Date of this Consent Decree.

59. Defendant is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Decree. “Satisfactory completion,” where used in this Section, means that the evaporation system and all appurtenant equipment has been installed, tested, started up, and used in full operation as intended by the manufacturer for a period of at least fourteen (14) Days of Facility production. Defendant may use contractors or consultants, but is fully responsible for planning and implementing the SEP.

60. Regarding the SEP, Defendant certifies the truth and accuracy of each of the following:

- a. that all cost information provided to EPA in connection with EPA’s approval of the SEP is complete and accurate and that

Defendant in good faith estimates that the cost to implement the SEP is approximately \$7,700,000;

- b. that, as of the date of executing this Decree, Defendant is not required to perform or develop the SEP by any federal, State, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;
- c. that the SEP is not a project that Defendant was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Decree;
- d. that Defendant has not received and will not receive credit for the SEP in any other enforcement action;
- e. that Defendant will not receive any reimbursement for any portion of the SEP from any other person; and
- f. that Defendant is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in Paragraph 58. For purpose of this certification, the term “open federal financial assistance transaction” refers to a grant, cooperative agreement, loan, federally-guaranteed loan guarantee, or other mechanism for providing federal financial assistance whose performance period has not yet expired.

61. SEP Completion Report. Within thirty (30) Days of satisfactory completion of the SEP, Defendant shall submit a SEP Completion Report to the EPA and ADEM, in accordance with Section XVIII (Notices). The SEP Completion Report shall contain the following information:

- a. a detailed description of the SEP as implemented;
- b. a description of any problems encountered in completing the SEP and the solutions thereto;
- c. an itemized list of all eligible SEP costs expended;
- d. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- e. a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).

62. EPA and ADEM may, in their discretion, require information in addition to that described in the preceding Paragraph, to evaluate Defendant's SEP Completion Report.

63. The United States, after receiving the SEP Completion Report and conferring with ADEM, shall notify Defendant whether it agrees Defendant has satisfactorily completed the SEP. If Defendant has not satisfactorily completed the SEP

in accordance with this Consent Decree, stipulated penalties may be assessed under Section XII.

64. Disputes concerning the satisfactory performance of the SEP and the amount of eligible SEP costs may be resolved under Section XIV (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.

65. Each submission required under this Section shall be signed by a Responsible Corporate Officer with knowledge of the SEP and shall bear the certification language set forth in Paragraph 75.

66. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SEP itself or its end product under this Decree shall include the following language: “This project was undertaken in connection with the settlement of an enforcement action, United States et al v. Kronospan, LLC, taken on behalf of the U.S. Environmental Protection Agency and the Alabama Department of Environmental Management under the Clean Water Act and the Alabama Water Pollution Control Act.”

67. For federal income tax purposes, Defendant agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.

XI. SAMPLING & REPORTING REQUIREMENTS

68. Defendant shall seek permission from OWSB and all other necessary entities to monitor at the Highway 202 Lift Station or one of two specific OWSB manholes, which are numbers M-21-018 or M-21-016, on a 10-inch sewer segment that only receives flow from the Defendant’s Facility, on one (1) Day of Facility production

each week until three-hundred and sixty-five (365) Days after either: (1) the submission of the Objectionable Solids Report required under Subparagraph 54.b above finds that Objectionable Solids are not present and do not have the potential to appear in the Facility's Discharge to the POTW; or (2) the submission of a Verification Report required under Subparagraph 54.d.vi above that finds Objectionable Solids are no longer present and do not have the potential to appear in the Facility's Discharge to the POTW.

69. Defendant shall begin weekly monitoring of the following parameters at the location or locations identified in the Objectionable Solids Work Plan described in Paragraph 54(a), upon receiving permission from OWSB and all other necessary entities. Samples for TSS, BOD, and COD shall be collected using a flow-proportional 24-hour composite technique and either an out-of-stream area-velocity or in-stream pressure-transducer type of flow measurement device. Samples for pH and temperature shall be collected using a grab technique when retrieving the composite sample and analyzed in the field. Defendant shall use 40 C.F.R. Part 136 methods, and, additionally, composite sample analyses shall employ the Kronospan Sample Preparation Procedure.

70. Quarterly Monitoring Reports. On a quarterly basis, within thirty (30) Days after the end of each calendar year Quarter (i.e., by April 30, July 30, October 30, and January 30), Defendant shall submit electronically to the EPA and ADEM an effluent monitoring report ("Quarterly Monitoring Report") that includes the information collected pursuant to this Paragraph 69. The Quarterly Monitoring Reports shall describe:

- a. Date and timeframe over which the samples were collected;

- b. Location(s) where samples were collected;
- c. Method(s) of sample collection;
- d. Analytical methods used and times of analyses;
- e. Analytical results and units of measurement;
- f. Total discharge flow over the sample period; and
- g. pH and temperature equipment calibration information.

71. Quarterly Compliance Reports.

- a. After the Effective Date of this Consent Decree, within thirty (30) Days after the end of each Quarter, until termination of this Consent Decree pursuant to Section XXII, Defendant shall submit a Quarterly Compliance Report for the preceding Quarter that shall include a list of any violations of the SID Permit or Compliance Standards, and the status of compliance and implementation of the Work. For any reported noncompliance with the SID Permit or Compliance Standards, Defendant shall provide an explanation for the cause(s) of the noncompliance, remedial measures taken, and date for achieving compliance, and a list of stipulated penalties owed and documentation of payment.
- b. The Quarterly Compliance Reports shall also include a description of any noncompliance with the requirements of this Consent Decree and an explanation of the violation's likely cause(s) and the status of the remedial measures taken, or to be taken, to prevent or minimize such violation. If Defendant violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Defendant shall notify

the United States and ADEM of such violation and its likely duration, within ten (10) Days of the Day Defendant first becomes aware of the violation, with an explanation of the violation's likely cause(s) and of the remedial measures taken, or to be taken, to eliminate such violation. If the cause(s) of a violation cannot be fully explained at the time the Report is due, Defendant shall so state in the Report and provide a date by which a full report will be provided. Defendant shall investigate the cause(s) of the violation and shall then submit an amendment to the Report, including a full explanation of the cause(s) of the violation, within thirty (30) Days of the Day Defendant becomes aware of the cause(s) of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section XIII (Force Majeure) of this Consent Decree.

72. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Defendant's performance under this Decree, or the performance of its Facility, may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify the EPA and ADEM either orally or by electronic transmission as soon as possible, but no later than twenty-four (24) hours after

Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

73. All reports shall be submitted to the persons designated in Section XVIII (Notices).

74. The reporting required under this Consent Decree shall supersede any reporting requirements of the EPA AO and/or ADEM CO.

75. Each report submitted by Defendant under this Section shall be signed by a Responsible Corporate Officer of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

76. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the CWA or implementing regulations, or by any other federal, State, or local law, regulation, permit, or other requirement.

77. Any information provided pursuant to this Consent Decree may be used by the United States or ADEM in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

XII. STIPULATED PENALTIES

78. Defendant shall be liable for stipulated penalties to the United States and ADEM for violations of this Consent Decree as specified below, unless excused under Section XIII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

- a. Late Payment of Civil Penalties If Defendant fails to pay the civil penalties required to be paid under Section VI (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1,500 per Day for each Day that any payment is late, in addition to interest on the portion of the civil penalties not paid.
- b. Non-Compliance with Consent Decree. The following stipulated penalties shall accrue per violation per Day for each violation of any requirement of this Consent Decree, except for those violations otherwise specifically identified in this Paragraph 78.

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500 per Day or portion thereof	1 st through 14 th Day
\$ 1,500 per Day or portion thereof	15 th through 30 th Day
\$ 3,000 per Day or portion thereof	31 st Day and beyond

- c. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section XI:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 250 per Day or portion thereof	1 st through 14 th Day
\$ 500 per Day or portion thereof	15 th through 30 th Day
\$ 750 per Day or portion thereof	31 st Day and beyond

- d. Pass-Through or Interference Violations. The following stipulated penalties shall accrue for each initial and subsequent violation that results in Pass-Through or Interference under 40 C.F.R. § 403.5(a)(1) at the POTW caused or contributed to by pollutants or wastewater introduced by the Facility to the POTW resulting in violations of

the POTW's NPDES Permit, either alone or in conjunction with a discharge or discharges from other sources, after the Effective Date of this Consent Decree:

Period of Noncompliance	Per Initial Violation Penalty	Additional Per Day Penalty
From Effective Date of Consent Decree to 150 Days After Effective Date	\$1,000	\$500
From 151 Days After Effective Date of Consent Decree to 300 Days After Effective Date	\$2,000	\$500
From 301 Days After Effective Date of Consent Decree to 600 Days After Effective Date	\$5,000	\$500
From 601 Days After Effective Date of Consent Decree Until Consent Decree Termination	\$10,000	\$500

An upset condition as provided in the SID Permit shall not be considered Interference for the purposes of this Subparagraph.

e. Discharge Limit Violations. The following stipulated penalties shall accrue for: (i) each exceedance of Discharge Limitations set forth in the SID Permit, or any subsequently-modified SID Permit; (ii) each violation of the Specific Prohibitions, other than Pass-Through and Interference; and (iii) each exceedance of any local limits incorporated in a future or modified SID:

Penalty Per Violation Per Day	Period of Noncompliance
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\$ 500 per Day or portion thereof	1 st through 14 th Day
\$ 750 per Day or portion thereof	15 th through 30 th Day
\$ 1,000 per Day or portion thereof	31 st Day and beyond

f. Non-Discharge Limit Violations of SID Permit. The following stipulated penalties shall accrue for each Non-Discharge Limit Violation of the SID Permit or any subsequently-modified SID Permit at the Facility after the Effective Date of this Consent Decree. Non-Discharge Limit Violations of the SID Permit or any subsequent modifications to the SID Permit only include: (i) failure to resample after a Discharge Limit Violation; (ii) failure to submit monitoring reports; (iii) failure to comply with monitoring requirements; and (iv) failure to report, or to timely report, slug discharges or discharge limit violations to the POTW:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 500 per Day or portion thereof	1 st through 14 th Day
\$ 750 per Day or portion thereof	15 th through 30 th Day
\$ 1,000 per Day or portion thereof	31 st Day and beyond

g. SEP Compliance. If Defendant fails to satisfactorily complete the SEP by the deadline set forth in Section X and Appendix B, Defendant shall pay a stipulated penalty in the amount of 80% of the difference between \$7,700,000 (the amount Defendant is obligated to spend on the SEP) and the amount Defendant actually spends on the SEP. Thus, for example, if Defendant only spends \$2,000,000 on the SEP, it shall pay a stipulated penalty of \$4,560,000 ($0.80 \times (\$7,700,000 - \$2,000,000)$). The penalty under this

Subparagraph shall accrue as of the date specified for completing the SEP or the date performance ceases, whichever is earlier. No stipulated penalty shall otherwise be assessed if the Defendant complies with the SEP requirements.

79. Except as provided in Subparagraph g, stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

80. Defendant shall pay stipulated penalties to the United States and ADEM within thirty (30) Days of a written demand by either Plaintiff. Defendant shall pay fifty (50) percent of the total stipulated penalty amount due to the United States and fifty (50) percent to ADEM. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiff.

81. Either Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

82. Stipulated penalties shall continue to accrue as provided in Paragraph 79, during any Dispute Resolution, but need not be paid until the following:

- a. If the dispute is resolved by agreement of the Parties or by a decision of EPA or ADEM that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States and/or ADEM within thirty (30) Days of the effective date of the agreement or the receipt of EPA's or the ADEM's decision or order.

b. If the dispute is appealed to the Court and the United States or ADEM prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in Subparagraph 82.c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within fifteen (15) Days of receiving the final appellate court decision.

83. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 37, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

84. Defendant shall pay stipulated penalties owing to ADEM in the manner set forth in Paragraph 38 and shall include a cover letter stating the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

85. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or ADEM from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

86. The payment of penalties and interest, if any, shall not alter in any way Defendant's obligation to complete the performance of the requirements of this Consent Decree.

87. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XVI (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for Defendant's violation of this Decree or applicable law, including but not limited to an action against Defendant for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

XIII. FORCE MAJEURE

88. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event: (a) as it is occurring; and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

Notwithstanding the foregoing, any failure by any overseas contractor or supplier to design or install the equipment necessary to meet any required timeframe to accomplish a defined task set forth in Section X and Appendix B may constitute “Force Majeure” to the extent that any such failure to meet a timeframe under Section X or Appendix B is caused by the COVID-19 public health crisis, even though COVID-19 is already under way, provided, that Defendants otherwise meet the requirements for force majeure under this Consent Decree.

89. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Defendant shall provide notice orally or by electronic or facsimile transmission to the EPA and ADEM in accordance with Section XVIII (Notices), within seventy-two (72) hours of when Defendant first knew that the event might cause a delay. Within seven (7) Days thereafter, Defendant shall provide in writing to EPA and ADEM an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Defendant’s rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Defendant from asserting any claim of force majeure for that event for the period of such failure to comply, and

for any additional delay caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

90. If the EPA, after a reasonable opportunity for review and consultation with ADEM, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by the EPA, after a reasonable opportunity for review and consultation with ADEM, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. The EPA will notify Defendant in writing, with a copy to ADEM, of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

91. If the EPA, after a reasonable opportunity for review and consultation with ADEM, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, the EPA will notify Defendant in writing, with a copy to ADEM, of its decision.

92. If Defendant elects to invoke the dispute resolution procedures set forth in Section XIV (Dispute Resolution), it shall do so no later than fifteen (15) Days after receipt of the EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts

were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 88 and 89. If Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to the EPA and the Court.

XIV. DISPUTE RESOLUTION

93. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States or ADEM to enforce any obligation of Defendant arising under this Decree.

94. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States, with a copy to ADEM, a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed thirty (30) Days from the date the dispute arises, unless that period is modified by written agreement. The EPA shall maintain an administrative record of the dispute, which shall contain all statements of the Parties, including supporting documentation, submitted pursuant to this Section.

95. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, reached after consultation with ADEM, shall be considered binding unless, within thirty (30) Days after the conclusion of the informal

negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

96. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the period provided in the preceding Paragraph, by serving on the United States, with a copy to ADEM, a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

97. The United States, after consultation with ADEM, shall serve the Plaintiffs' Statement of Position within forty-five (45) Days of receipt of Defendant's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Plaintiff and Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

98. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States and ADEM, in accordance with Section XVIII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent

Decree. The motion may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 54, unless the Plaintiffs raise a new issue of law or fact in the Statement of Position.

99. The United States, after consultation with ADEM, shall respond to Defendant's motion within the period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

100. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 96 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval under this Consent Decree by the EPA, in consultation with ADEM; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall have the burden of demonstrating, based on the administrative record, that the position of the United States or ADEM is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 96, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and better further the objectives of the Consent Decree.

101. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides.

Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 82. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XII (Stipulated Penalties).

XV. INFORMATION COLLECTION AND RETENTION

102. The United States, the State, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendant's compliance with this Consent Decree.

103. Upon request, Defendant shall provide the EPA and ADEM or their authorized representatives splits of any samples taken by Defendant. Upon request, the EPA and ADEM shall provide Defendant splits of any samples taken by the EPA or ADEM.

104. Until five (5) years after the termination of this Consent Decree, Defendant shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to Defendant's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the State, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

105. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant shall notify the United States and ADEM at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the State, Defendant shall deliver any such documents, records, or other information to the EPA or ADEM. Defendant may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Defendant asserts such a privilege, it shall

provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Defendant. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

106. Defendant may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) under 40 C.F.R. Part 2 and confidential information pursuant to Ala. Code §§ 22-22-9, 41-22-4, and 41-22-5 and ADEM Admin. Code r. 335-1-1-.06. As to any information that Defendant seeks to protect as CBI and confidential information, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2 and confidential information pursuant to Ala. Code §§ 22-22-9, 41-22-4, and 41-22-5 and ADEM Admin. Code r. 335-1-1-.06, respectively.

107. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable federal or State laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XVI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

108. This Consent Decree resolves the civil claims of the United States and ADEM for the violations alleged in the Complaint filed in this action through the Date of Lodging.

109. The United States and ADEM reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States or ADEM to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions. The United States and ADEM further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

110. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penalties, other appropriate relief relating to the Facility or Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 108.

111. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for

achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and ADEM do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CWA, 33 U.S.C. § 1251, et seq.; the AWPCA, Ala. Code § 22-22-1, et seq.; or with any other provisions of federal, State, or local laws, regulations, or permits.

112. This Consent Decree does not limit or affect the rights of Defendant or of the United States or the State against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

113. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XVII. COSTS

114. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and ADEM shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XVIII. NOTICES

115. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the Department of Justice by email: eescdcopy.enrd@usdoj.gov
Re: DJ # 90-5-1-1-10934

As to the Department of Justice by mail: EES Case Management Unit
Environment and Natural Resources

Division

U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ Case No. 90-5-1-1-10934

Division

Karl Fingerhood
Environmental Enforcement Section
Environment and Natural Resources

U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Tel: (202) 514-7519
Karl.Fingerhood@usdoj.gov

As to the EPA:
Coordinator

David Phillips, Pretreatment Program

Region 4

U.S. Environmental Protection Agency,

Sam Nunn Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Tel: (404) 562-9773
Phillips.David@epa.gov

Region 4

Suzanne K. Armor, Attorney-Advisor
Water Law Office
Office of Regional Counsel
U.S. Environmental Protection Agency,

61 Forsyth Street, S.W.
Atlanta, Georgia 30303

Tel: (404) 562-9701
Armor.Suzanne@epa.gov

As to ADEM:

Scott Ramsey, Chief
Industrial Section
Water Division
Alabama Department of Environmental
Management
P.O. Box 301463
Montgomery, Alabama 36130-1463
Tel: (334) 271-7838
SRamsey@adem.alabama.gov

Carrie Blanton
Assistant Attorney General
Alabama Department of Environmental
Management
Office of General Counsel
P.O. Box 301463
Montgomery, Alabama 36130-1463
Tel: (334) 394-4357
Carrie.Blanton@adem.alabama.gov

As to Defendant:

Hans-Juergen Obermaier
Chief Executive Officer
1 Kronospan Way
Eastaboga, AL 36260
Tel: (256) 741-8755
h.obermaier@kronospanusa.com

William L. Penny
Burr & Forman, LLP
222 2nd Avenue South, Suite 2000
Nashville, TN 37201
Tel: (615) 724-3213
bpenny@burr.com

116. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

117. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XIX. EFFECTIVE DATE

118. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XX. RETENTION OF JURISDICTION

119. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XIV and XXI, respectively, or effectuating or enforcing compliance with the terms of this Decree.

XXI. MODIFICATION

120. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court.

121. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XIV (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 100, the Party seeking the modification bears the

burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XXII. TERMINATION

122. After Defendant has completed the requirements of Sections VIII (Compliance Requirements), IX (Work to be Performed), X (Supplemental Environmental Projects), and XI (Sampling and Reporting Requirements), and has paid the civil penalties and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the United States and ADEM a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

123. Following receipt by the United States and ADEM of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with ADEM, agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

124. If the United States, after consultation with ADEM, does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section XIV. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination until sixty (60) Days after service of its Request for Termination.

XXIII. PUBLIC PARTICIPATION

125. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R.

§ 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

XXIV. SIGNATORIES/SERVICE

126. Each undersigned representative of Defendant, ADEM, the EPA, and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

127. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.

128. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

129. Defendant need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXV. INTEGRATION

130. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than Deliverables that are subsequently submitted and approved pursuant to this Consent Decree, the Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

XXVI. FINAL JUDGMENT

131. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, ADEM, and Defendant.

XXVII. APPENDICES

132. The following Appendices are attached to and part of this Consent Decree:

“Appendix A” is the Sampling Evaluation and Performance Audit Inspection Report (June 7, 2017);

“Appendix B” is a description of the SEP; and

“Appendix C” is a list of Deliverables required under Sections IX (Work to be Performed) and X (Supplemental Environmental Project) of this Consent Decree and their corresponding triggering events. In the event of a discrepancy between the deadlines represented in Appendix C and this Consent Decree, the deadlines for Deliverables in this Consent Decree shall control.

DATED and ENTERED this 6th day of July, 20 21.



UNITED STATES DISTRICT JUDGE
Northern District of Alabama

THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

FOR Plaintiff THE UNITED STATES OF AMERICA:

PRIM F. ESCALONA
UNITED STATES ATTORNEY

Date: 10/30/2020

/S/ Jason R. Cheek by KJF (with Permission)

JASON R. CHEEK
Assistant U.S. Attorney
1801 4th Avenue North
Birmingham, Alabama 35203
Telephone: (205) 244-2104
Jason.Cheek@usdoj.gov

THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

FOR Plaintiff THE UNITED STATES OF AMERICA:

ELLEN M. MAHAN
Deputy Section Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice

Date: 10/30/2020

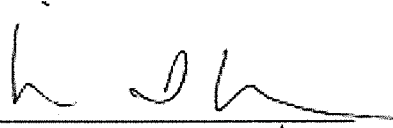
/s/ Karl J. Fingerhood
KARL J. FINGERHOOD
(Pennsylvania Bar #62360)
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044
Telephone: (202) 514-7519
Karl.Fingerhood@usdoj.gov

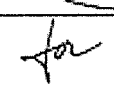
THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

:

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: 10/6/20




ROSEMARIE KELLEY
Director
Office of Civil Enforcement
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460


THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date:

10/6/20



ROSEMARIE KELLEY
Director
Office of Civil Enforcement
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date:

9/11/20



LEIF PALMER
Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

SUZANNE K. ARMOR
Associate Regional Counsel
Office of Water Legal Support
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

FOR Plaintiff ALABAMA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT:

Date: 10-22-2020



LANCE R. LEFLEUR
Director
Alabama Department of Environmental
Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Date: 10/22/2020




CARRIE BLANTON
Assistant Attorney General
Alabama Department of Environmental
Management
Office of General Counsel
P.O. Box 301463
Montgomery, Alabama 36130-1463

THE UNDERSIGNED PARTIES enter into this Joint Stipulation of Settlement in the matter of United States et al. v. Kronospan, LLC:

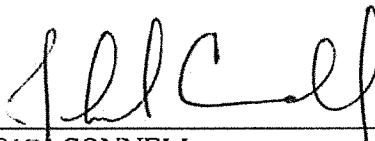
FOR Defendant KRONOSPAN, LLC:

Date: 04. AUG 2020



HANS-JUERGEN OBERMAIER
Chief Executive Officer
1 Kronospan Way
Eastaboga, Alabama 36260

Date: 07.31.2020



JOHN CONNELL
Human Resource Director
Kronospan
1 Kronospan Way
Eastaboga, Alabama 36260



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

Field Services Branch
980 College Station Road
Athens, Georgia 30605-2720

June 7, 2017

4SESD-FSB

MEMORANDUM

SUBJECT: Sampling Evaluation and Performance Audit Inspection
Oxford Water Works and Sewer Board (OWWSB)
Tull C. Allen WWTP
2795 Silver Run Road
Oxford, Alabama
SESD Project ID: 17-0286

FROM: Cornell D. Gayle, PE, Environmental Engineer
Enforcement Section

CDG
6/7/17

Bill Simpson, Environmental Scientist
Enforcement Section

WES 6.7.17

THRU: Mike Bowden, Chief
Enforcement Section

MB

TO: Maurice Horsey, IV, Chief
Municipal and Industrial Enforcement Section
NPDES Permitting and Enforcement Branch

Attached is the Sampling Evaluation (SE) and Performance Audit Inspection (PAI) Report for the Oxford Water Works and Sewer Board and Tull C. Allen WWTP located in Oxford, Alabama. The SE/PAI was conducted during March 28-29, 2017. The overall sampling procedures of the OWWSB were evaluated and found to be satisfactory. The Tull C. Allen WWTP Analytical Laboratory was following the analytical methods specified in 40 CFR Part 136. We have made no distribution of the report. Please distribute the report to the appropriate personnel. If you have any questions, please contact me at (706) 355-8732.

Attachment

Project ID: 17-0286

**Sampling Evaluation and
Performance Audit Inspection
Oxford Water Works and
Sewer Board**



Tull C. Allen WWTP

**2795 Silver Run Road
Oxford, Alabama**

Project Date: March 28-29, 2017

Report Date: June 07, 2017

Project Leaders: Bill Simpson & Cornell Gayle, PE
Enforcement Section
Field Services Branch
Science & Ecosystem Support Division
USEPA – Region 4
980 College Station Road
Athens, Georgia 30605-2720

The activities depicted in this report are accredited under the US EPA Region 4 Science and Ecosystem Support Division ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation AT-1644.

Science & Ecosystem Support Division

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Requestor:

Maurice Horsey, IV, Chief
Municipal and Industrial Enforcement Section
NPDES Permitting and Enforcement Branch
USEPA Region 4, 61 Forsyth St. SW
Atlanta, Georgia 30303-8960

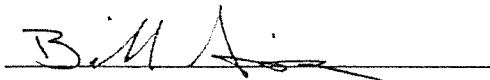
Analytical Support:

EPA Region 4 SEDS Laboratory
980 College Station Rd
Athens, GA 30605

Pace Analytical Services
8 Tower Circle West
Ormond Beach, FL 32174

Approvals:

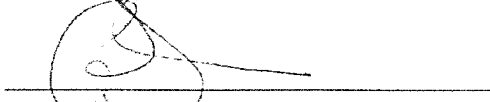
SESD Project Leaders:



Bill Simpson
Enforcement Section
Field Services Branch
980 College Station Road
Athens, GA 30605-2720

6-7-17

Date

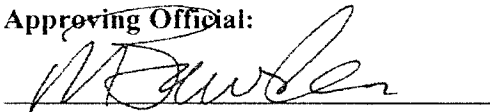


Cornell Gayle, PE
Enforcement Section
Field Services Branch
980 College Station Road
Athens, GA 30605-2720

6/7/17

Date

Approving Official:



Mike Bowden, Chief
Enforcement Section
Field Services Branch
980 College Station Road
Athens, GA 30605-2720

6/7/17

Date

SECTION 1: EXECUTIVE SUMMARY

During March 28-29, 2017, Cornell Gayle and Bill Simpson of the United States Environmental Protection Agency (EPA) conducted a Sampling Evaluation of the Oxford Water Works and Sewer Board (OWWSB), located at 600 Barry Street, Oxford, Alabama 36203 and a Performance Audit Inspection (PAI) of the Tull C. Allen Wastewater Treatment Plant (WWTP), located at 2975 Silver Run Road, Munford, Alabama 36268. Section 1 of this report contains an Executive Summary of the Evaluation/Inspection, Section 2 will discuss the Sampling Evaluation, and Section 3 will discuss the Performance Audit Inspection.

The Evaluation/Inspection was requested by the EPA Region 4 Water Protection Division in Atlanta, Georgia. The primary goal of this study was to validate the quality of the data from the Tull C. Allen WWTP Laboratory, and in the process of meeting the primary goal, to also identify the quantity of Total Suspended Solids (TSS) being discharged from Kronospan, LLC, a local flooring manufacturer. The sampling was conducted at a manhole near the Kronospan, LLC facility.

The overall sampling procedures of the OWWSB were evaluated and found to be satisfactory. The necessary equipment was present, the sampling apparatus was installed correctly, and the samples were handled appropriately between the time of sample collection and sample delivery. The appropriate records were maintained.

In evaluating the Tull C. Allen WWTP Analytical Laboratory, the facility was following the analytical methods specified in 40 CFR Part 136. The laboratory had appropriate safety equipment and emergency equipment available. The laboratory conducted quality control checks on equipment, instrumentation calibration, and standard solutions. The laboratory maintained appropriate records of reagent preparation, instrument calibration, and maintenance. Based on the EPA inspection, and the December 16, 2014 ADEM PAI, the Tull C. Allen WWTP Analytical Laboratory was producing defensible data with a known precision and accuracy.

The EPA and Facility analytical results for TSS were inconsistent. The inconsistencies in laboratory results appeared to result from material found in the samples from Kronospan, LLC., which caused the following problems:

- Excess and multi-phase solids were causing interference with ability to obtain a representative sample.
- Excess and multi-phase solids were causing an increase in maintenance at the pump station wet well, as well as septic conditions.
- Excess and multi-phase solids were causing interference with normal TSS analysis.
- Excess and multi-phase solids were causing interference with normal WWTP operations. A separate basin was used to pretreat this specific waste and settle any remaining solids not trapped in pump station wet well. The flow was then metered out into the plant for normal treatment and discharge.

SECTION 2: SAMPLING EVALUATION REPORT

INTRODUCTION

During March 28-29, 2017, Cornell Gayle and Bill Simpson of the United States Environmental Protection Agency (EPA) conducted a Sampling Evaluation of the Oxford Water Works and Sewer Board (OWWSB). The OWWSB was located at 600 Barry Street, Oxford, Alabama, 36203. The Evaluation/Inspection was conducted as requested by the EPA Region 4 Water Protection Division in Atlanta, Georgia.

GOALS

The primary goal of this study was to validate the quality of the data from the Tull C. Allen WWTP Laboratory, and in the process of meeting the primary goal to also identify the quantity of TSS being discharged from Kronospan, LLC. Concurrent with the Sampling Evaluation, EPA also conducted a PAI of the Tull C. Allen WWTP Laboratory to obtain specific information regarding the quality of the TSS data produced from the facility. For further details on the laboratory, please see the Performance Audit Inspection portion of this report.

SUMMARY

The overall sampling methods were evaluated and found to be satisfactory. Sampling was observed/conducted at a manhole located east of the eastern (semi-truck) entrance to Bridgewater Interiors, Eastaboga, AL 36260 (N 33.60685, W 85.98595). This location was chosen to isolate discharge from Kronospan, LLC located east of the sampling location along Bynum Blvd.

The following comments are provided to improve NPDES sampling collection:

- The OWWSB sampler provided a very detailed explanation of the compliance, sampling, and maintenance challenges facing the WWTP. All information was available if not immediately, then in a very timely manner.
- The OWWSB should consider wearing gloves during any sampling event to protect the samples from contamination and for health and safety reasons when handling untreated wastewater.
- For safety purposes collect grab samples using a pole, from a safe distance, when practical.

SAMPLE COMPARISON AND EVALUATION

The EPA collected samples for Total Suspended Solids (TSS) and Formaldehyde. The following is a discussion of the sampling method, site observations, and results. The sample was split with the OWWSB, and they were requested to analyze the sample according to Standard Methods 2540A, the same method used by the EPA Laboratory.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

1. Sampling Method

The EPA installed an ISCO 3700 automatic sampler with a single 15 Liter (15L) plastic composite container. The sampler was programmed to collect an aliquot every 15 minutes over a 24-hour period for a total of 96 aliquots. Each aliquot was programmed to collect 130 mL. Purge and rinse cycles accompanied each aliquot. The sampler attempted to collect a total of 92 aliquots before the sampling event was ended. After the sampling period, all samples were distributed, handled, and stored according to the appropriate SESD procedures, see subsection 4. *SESD Procedures* below for more information.

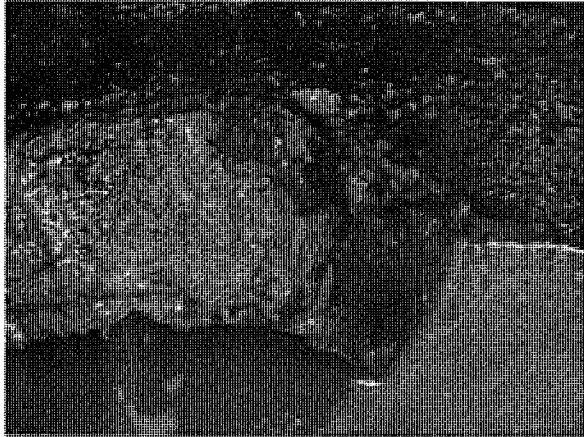


Photo 1: Area of infiltration at influent end of manhole. Infiltrate was clear and appeared free of silt and other sandy debris.

2. Site Observations

Manhole Observations

Inspection of the manhole and sampling area revealed ground water infiltration and evidence of surcharge. The manhole was approximately eight feet deep from rim to bench. The surrounding area seemed to be a storm water swale with the manhole rim on the elevated portion of the swale. The next closest manhole was elevated by four feet or more (by visual observation). Over three inches of rain had fallen in Anniston, AL area over the preceding month with 0.22 inches of that falling March 27, the day prior to the sampling event. On day one of the sampling period, standing water was observed. This had subsided by day two. As a result of the preceding rain, flaws in the manhole were exposed. The manhole had significant infiltration around the influent pipe. The infiltrate appeared clear and to contain minimum if no sediment, see Photo 1 and Video 1.

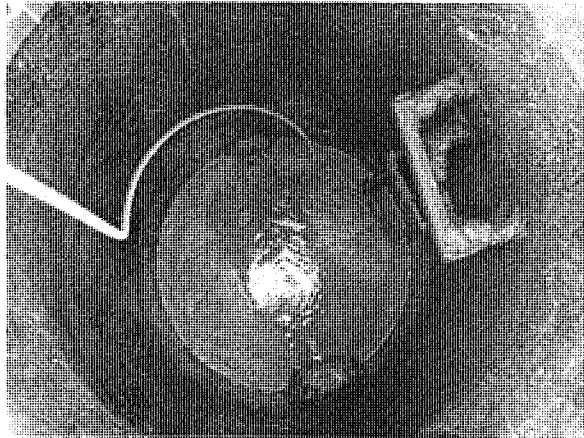


Photo 2: Overhead view of manhole. Flow was from the bottom toward the top of the photo. Note the debris on the steps and black coating on the manhole surface indicating repeated surcharge. The channel was undefined due to the infiltration load at the time this photo was taken. The influent pipe was not at capacity coming into the manhole.

Further inspection of the manhole indicated evidence of surcharge due to the amount of debris on the manhole steps and the ununiformed speckled black coating on an otherwise gray concrete manhole, see Photo 2.

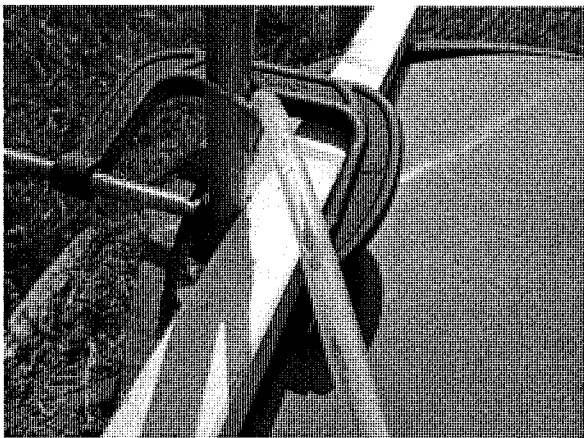


Photo 3: Debris remaining in sample tubing after 92 attempted aliquots.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



Photo 4: Material which clogged the strainer of the automatic sampler as clumped in the manhole.

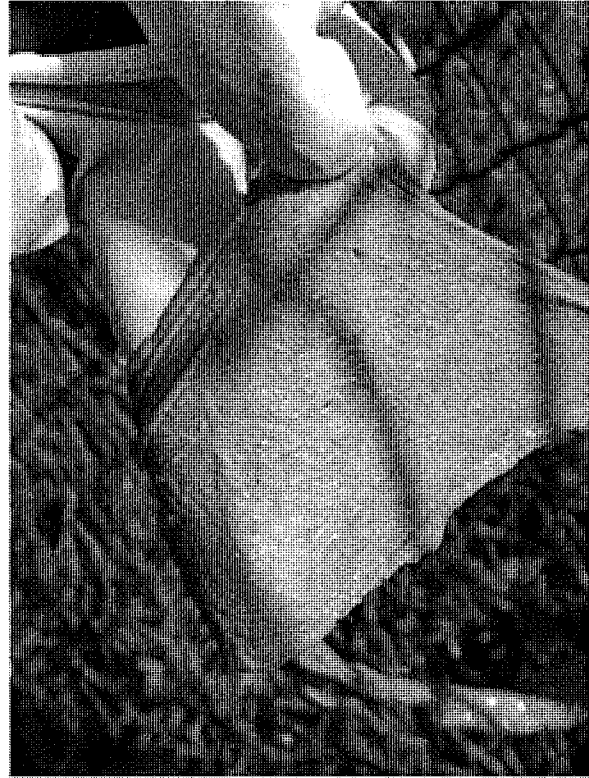


Photo 5: Material which clogged the strainer stretched out into a single layer.

It was observed by EPA personnel that no wastewater was collected for the 92nd aliquot. The tubing was inspected and particulate matter was found lodged, but not blocking the flow path, see Photo 3. Further observation revealed the influent strainer to the automatic sampler was covered in an unidentifiable material, see Photo 4. This material had the appearance of tan colored thin fabric, a slippery texture, a distinct sweet odor, and broke into smaller strings with minimal effort, see Photo 5. As a result of the sample line clogging, approximately 5 of 12.5L of sample was collected during the 24-hour period.

Pump Station Observations

The pump station was located west of Bridgewater Interiors on Bynum Blvd (N 33.60685, W 85.98864). The pump station consisted of four pumps: two pumps with 80HP and two pumps with 35HP. The station serviced Kronospan, Bridgewater Interiors, and two small neighborhoods totaling approximately 60 residences. The wet well was approximately 25 feet by 10 feet, based on visual estimate.

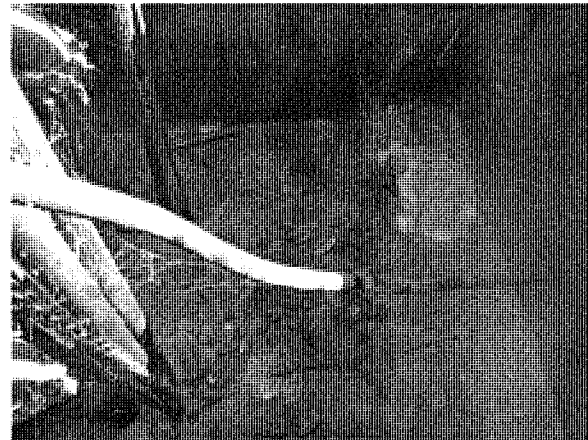


Photo 6: Pump Station wet well downstream of sampling location. Note the heavy buildup of material on surface. It is estimated to be one foot thick.

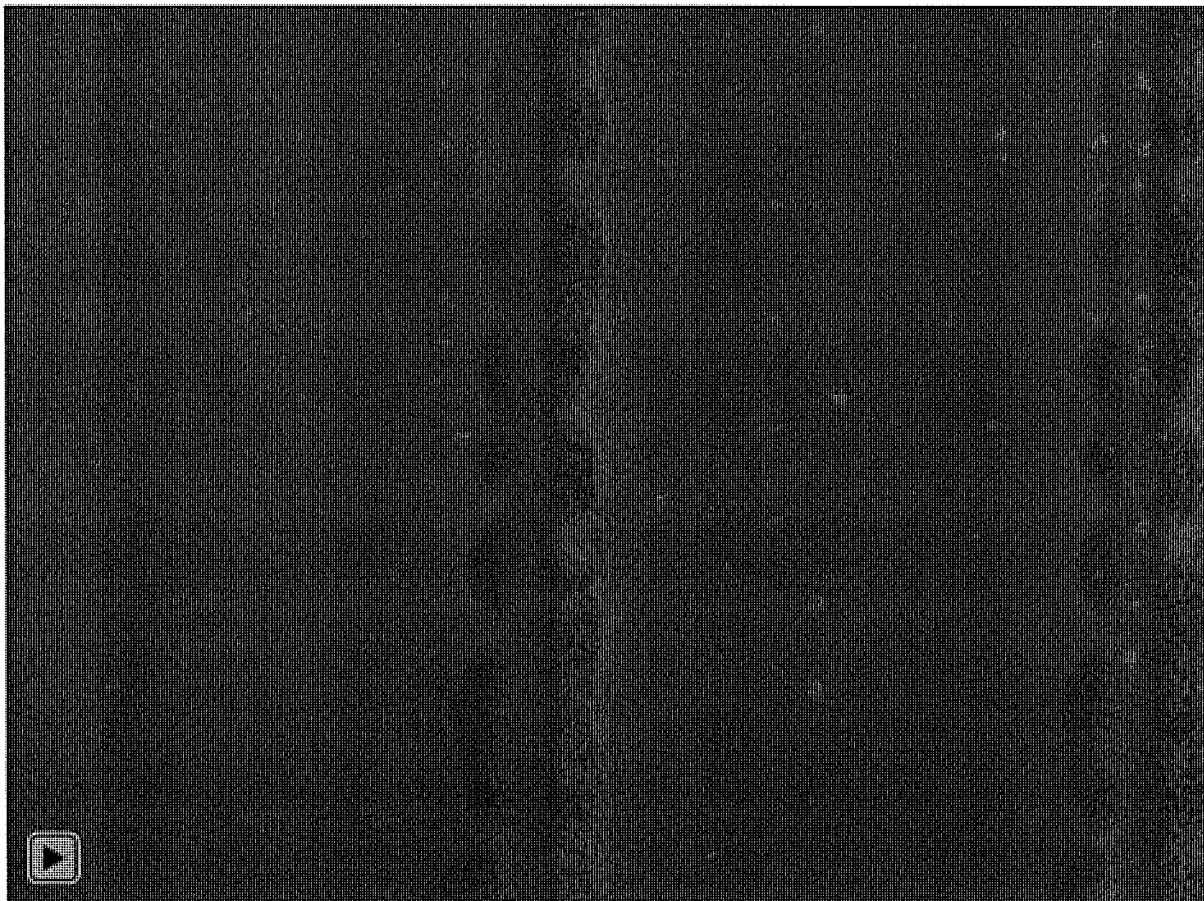
Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

The pumps were dismantled and cleaned annually by OWWSB personnel. No additional pump service had been required. The wet well had about one foot of floatable material on the surface. The wet well was cleaned frequently to prevent the buildup of material on the surface, see Photo 6.

3. Sample Results

All sampling activities were observed/conducted at a manhole located east of the eastern entrance to Bridgewater Interiors, Eastaboga, AL 36260 (N 33.60685, W 85.98595). The flow was reported to originate from Kronospan, LLC located east of the sampling location along Bynum Blvd. This could not be verified.

Due to the interferences from the unknown substance in Photos 4 and 5, a full 24-hour composite sample was not collected. Less than half of the required volume to meet the requirements for a 24-hour NPDES composite sample was collected. However, a sufficient sample volume was collected to allow analytical method comparison between the Tull C. Allen WWTP and EPA laboratories.



Video 1: Flow through manhole. Note the infiltration on the top side of the influent pipe, and size and quantity of objects flowing through the channel.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



Video 2: Demonstration of 100mL of sample being stirred using a 3" magnetic stir bar. This sample was representative of what comes directly from the manhole, without any modification.

It is worth noting a few observations about the samples. When they were shaken vigorously, a slight foam developed, and the solids began to break apart. The solids floated initially, then settled completely after approximately two hours. Following Standard Methods 2540 B, stirring the sample with a magnetic stirrer and sampling mid-stream mid-depth, did not allow the particles to break up sufficiently to provide a truly uniform aliquot for analysis, see Video 2. As a result, the facility had modified the procedure, to include blending the sample, to achieve a more uniform consistency when stirred, see Photo 7. For more details, see the Performance Audit Inspection section of this report.

A single grab sample was collected for formaldehyde; 138 µg/L was detected. Flow was not measured during this sampling event. The pipe was approximately eight inches in diameter.



Photo 7: Sample after blending. As with the original sample the solids will eventually settle toward the bottom of the container.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Assuming a minimum sewer slope of 0.0034 and a half-full pipe, the flow would be 0.31 cubic feet per second. 40 CFR Part 117 allows 100lbs of formaldehyde to be discharged before reporting is required. Using the assumed flow with our actual formaldehyde measurement yields a 24-hour discharge of 0.23lb/day. This is well below the 100lb reporting limit.

It is believed that the disparity between the values in Table 2 is due to the nature of the sample matrix and not the method used to analyze the sample. This was a two phase sample and according to Standard Methods 2540A “serious errors” may occur with the analysis of this type of sample.

Table 2: Summary of Total Suspended Solids (TSS) analytical results.

	SubSample	Vol. (mL)	TSS (mg/L)	% Relative Difference
RESULTS	OWWSB	10	1100	47
	OWWSB	25	1780	
	EPA	20	580	57
	EPA	20	320	

Table 3: Summary of field parameters.

	pH	Temperature	Dissolved Oxygen	Conductivity
Manhole	5.57	31.3	0.97	1010

Additionally, the two phases (clumpy vs liquid phase) may also be a driving factor in collecting uniform samples. Due to the consistency of the sample matrix, it appeared highly unlikely that any two duplicate samples will produce similar results consistently.

Further evidence that the matrix caused interference is the consistent relative percent difference between the laboratories. Percent difference here is calculated as:

$$\frac{|x_1 - x_2|}{\frac{(x_1 + x_2)}{2}} * 100\%$$

The high relative percent difference between duplicate analysis indicate the interference caused by the industry is creating a sample matrix which is difficult to analyze with TSS methods.

For further details on how the sample was analyzed, see the Performance Audit Inspection section of this report.

4. SEDS Procedures

Temperature, pH, specific conductance, and dissolved oxygen measurements were taken using an Orion 4 Star meter. Residual chlorine measurements were taken using indicator paper. All EPA sampling methods, measurements, and calibrations were conducted in accordance with the following EPA Region 4 SEDS procedures:

- Field Measurement of Dissolved Oxygen (SESDPROC-106-R3)
- Field pH Measurement (SESDPROC-100-R3)
- Field Measurement of Specific Conductance (SESDPROC-101-R5)
- Wastewater Flow Measurement (SESDPROC-109-R4)
- Field Screening of Total Residual Chlorine (SESDPROC-112-R4)
- Field Temperature Measurement (SESDPROC-102-R4)
- Wastewater Sampling (SESDPROC-306-R3)
- Global Positioning System (SESDPROC-110-R3)
- In-Situ Water Quality Monitoring (SESDPROC-111-R3)
- Field Sampling Quality Control (SESDPROC-011-R4)
- Logbooks (SESDPROC-010-R5)

All field measurements, sampling procedures, and chain of custody documentation were performed by SEDS's Field Services Branch personnel. The TSS samples were analyzed at the SEDS Laboratory in accordance with the Analytical Services Branch (ASB) Laboratory Operations and Quality Assurance Manual, April, 2016. The ASB laboratory is accredited under the EPA Region 4 ASB's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACLAS. The formaldehyde sample was analyzed by Pace Analytical Services laboratory, using EPA Method 8315A Determination Of Carbonyl Compounds By High Performance Liquid Chromatography (HPLC).

5. Quality Control Samples

One duplicate TSS sample was collected. The results of that sample exceeded 50% relative percent difference. See the subsection 3. *Sample Results* above for a full explanation of the disparity between samples.

SECTION 3: PERFORMANCE AUDIT INSPECTION REPORT

INTRODUCTION

On March 29, 2017, the United States Environmental Protection Agency (EPA) conducted an on-site Performance Audit Inspection (PAI) of the Tull C. Allen Wastewater Treatment Plant (WWTP) Analytical Laboratory in Oxford, Alabama. The on-site inspection consisted of:

- discussions with laboratory staff/analysts
- an inspection of the facilities and equipment
- records review, a review of operating procedures
- and a review of quality assurance activities

The goal was to obtain specific information regarding the quality of the Total Suspended Solids data produced from the facility, and to follow-up on reported findings by the Alabama Department of Environmental Management (ADEM) Performance Audit Inspection conducted on December 16, 2014. Concurrent with the PAI, EPA also installed an automatic sampler at a manhole downstream of Kronospan LLC, a local floor manufacturer, and collected a 24-hour composite sample for Total Suspended Solids (TSS) analyses. For further details on the sampling please see the Sampling Evaluation portion of this report. Representing the EPA during the inspection included:

Mr. Bill Simpson, EPA, Physical Scientist
Mr. Cornell Gayle PE, EPA, Environmental Engineer

The inspection began with an opening conference that included introductions of the EPA personnel and representative staff from Tull C. Allen WWTP. An explanation of the goals and objectives of the inspection was made by EPA personnel. Later the same day, a closing conference was held between the EPA and representative staff from Tull C. Allen WWTP. The purpose of the post assessment conference was for the auditors to summarize the general findings from the on-site evaluation, discuss the schedule for the findings report, and answer questions. This report presents the findings and recommendations from the inspection. The key managerial staff from Tull C. Allen WWTP participating in the assessment included:

Mr. Michael Livingston, Laboratory Analyst, Tull C. Allen WWTP
Mr. Tim Gaskins, Laboratory Analyst, Tull C. Allen WWTP
Mr. Destry Gilmore, Operator, Tull C. Allen WWTP

GENERAL LABORATORY DISCUSSION AND FINDINGS

1. Observations

The Tull C. Allen Analytical Laboratory was staffed with qualified analysts and supervisory personnel. The laboratory was housed in acceptable facilities with adequate workspace. The laboratory had ample equipment to perform day-to-day operations. Laboratory instrumentation

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

appeared to be in excellent operating condition. All analytical instrumentation necessary for performing analysis associated with Tull C. Allen WWTP's NPDES Permit (AL0058408) was available for inspection. The laboratory was purchasing distilled water from a local vender for use in the laboratory. It was noted the laboratory was in the process of transitioning from paper records toward electronic records.

During the inspection, it was observed that the laboratory was employing an additional sample preparation step by homogenizing samples with an electrical hand blender for total suspended solids (TSS) analysis, due to interference caused by Kronospan, LLC. This was a deviation from normal laboratory TSS analytical procedures, see Photos 8-10. This special deviation (process control modification) was only used when dealing with interference caused from the influent waste stream of one isolated industrial user. The laboratory was completely open and transparent about this method deviation. Laboratory working records indicate the exact date (October 10, 2016) this preparation step was instituted (see Appendix B: Laboratory Records and Documentation). Side by side comparison of this sample preparation deviation, and conventional TSS method parameters were also recorded and documented by the facility. The additional step provided for better reproducibility of results. The facility also observed that the waste particles settled before analysis, but would rise to the surface of the sample after mixing, see Photos 9 and 10. Conventional TSS methods using a magnetic stirring bar to shear particles and homogenize the sample were unsuccessful at achieving homogenization, hence the special deviation was used to achieve homogenization.

Except where noted under findings, laboratory analysts were following the revised and approved Standard Operating Procedures (SOPs). SOPs were kept current and up-to-date with approved analytical methods.



Photo 8: Lab Operator homogenizing the sample with an electric hand blender.

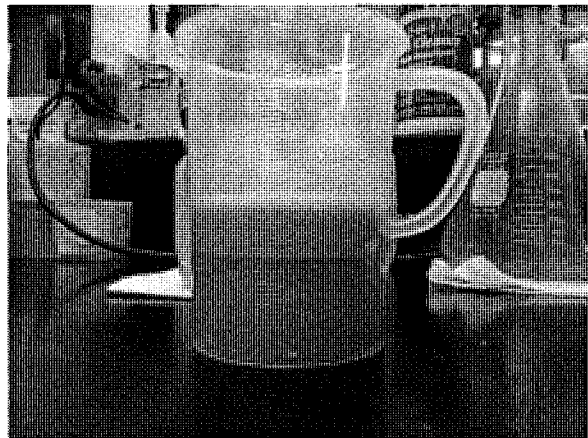


Photo 9: Homogenized sample after using the electric hand blender. Note the solids float on the surface.



Photo 10: Visual side by side comparison of homogenized sample on left using the electric hand blender and unmodified samples.

GENERAL LABORATORY QUALITY AND DOCUMENTATION

Findings for the EPA Region 4's NPDES laboratory assessments are defined as: factual and objective statements which provide evidence of non-conformance with any of the following, and which may adversely affect the quality of the data. Findings are supported with the following citations to applicable regulations.

- The current NPDES Permit AL 0058408, effective date, September 1, 2013.
- Official agency mandates and policies i.e. Title 40 of the Code of Federal Regulations (40 CFR) Part 122.41, conditions applicable to all permits, 40 CFR Part 136.3 identification of test procedures, 40 CFR Part 136.7 quality assurance and quality control.
- Standard Methods for the examination of water and wastewater.

Recommendations are those corrective measures that would enhance laboratory operations, but are not mandatory. The EPA strongly encourages implementation of the recommendations to better conform to standard laboratory practices currently employed within the environmental industry.

1. Findings/Corrective Actions

The following discussions present the findings, corrective actions, and recommendations based on the on-site evaluation and review of the documents submitted by the laboratory.

Finding: The laboratory was homogenizing samples with an electric hand blender due to the interference caused by an industrial user. This deviation was not clearly documented in laboratory standard operating procedures.

Note: Standard Methods, 2540 A, Section two, last paragraph, discusses the error and variability encountered in sampling and subsampling samples for the analysis of solids,

“Analyses performed for some special purposes may demand deviation from the stated procedures to include an unusual constituent with the measured solids. Whenever such variations of technique are introduced, record and present them with the results.”

The laboratory uses of an electric hand blender to homogenize industry waste is considered an acceptable practice as long as interference from the industry continues, and it is documented with the results.

Corrective Action: Update the Total Suspended Solids SOP to reflect the “when and why” the special use of an electric hand blender is used; such as, “whenever TSS sample analysis is impacted by interference cause by industrial waste streams, sometimes a variation of technique must be employed to more completely homogenize samples for analysis.”

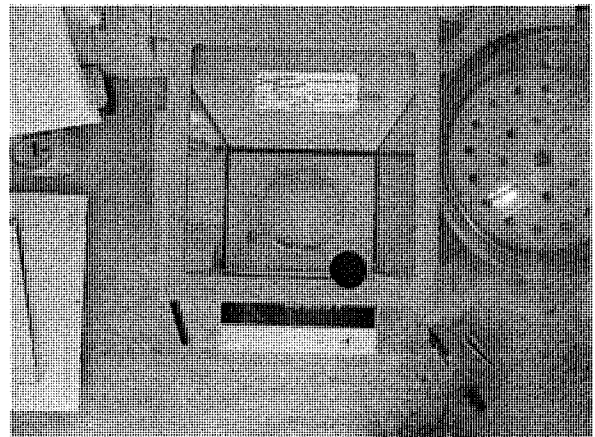


Photo 11: Ohaus analytical balance, on marble bench, with current calibration sticker.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Recommendation: The Southern Balance calibration sticker on the Ohaus, GA 110 - four place analytical balance, indicated a calibration date of December 12, 2016 and a calibration due date of December 2017. The Southern Balance calibration paper work posted on the wall behind the balance indicated a calibration date of January 4, 2016 and a calibration due date of January 31, 2017. **Why the date difference?** Ensure facility vendors provide proper documentation when servicing facility equipment, see Photos 11 and 12.

Observations: The ADEM PAI conducted on December 16, 2014 indicated several findings in the areas of instrument calibration and documentation. These findings were pursued during the audit, to find the following:

Note: The Laboratory was now using a calibrated weight set of various weights to verify the analytical balance calibration, see Photo 13.

Laboratory oven, refrigerator and incubator equipment were now using temperature devices that were recorded and checked daily.

The laboratory was using dedicated forms to document analysis times and sample custody (see Appendix B: Laboratory Records and Documentation). The Laboratory was attempting the transition to electronic recordkeeping.

The facility produced a working record documenting TSS drying times for multiple hours at 104 degrees Celsius (see Appendix B: Laboratory Records and Documentation).

There was no evidence of food and drinks being stored with the samples.

CONCLUSION

In evaluating the Tull C. Allen WWTP Analytical Laboratory, the facility was following the analytical methods specified in 40 CFR Part 136. The laboratory had appropriate safety equipment and emergency equipment available. The laboratory conducts quality control checks on equipment, instrumentation calibration, and standard solutions. The laboratory maintains appropriate records of reagent preparation, instrument calibration, and maintenance. Based on the EPA inspection, and the December 16, 2014 ADEM PAI, the Tull C. Allen WWTP Analytical Laboratory was producing defensible data with a known precision and accuracy.

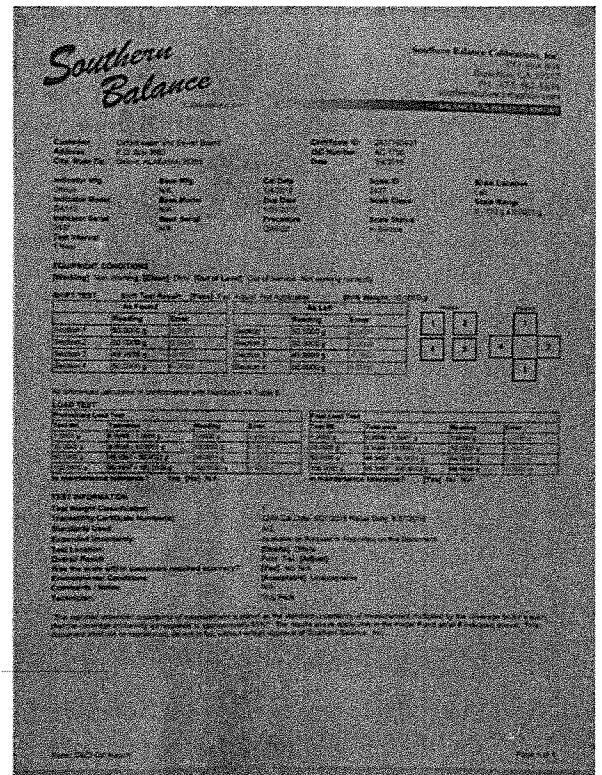


Photo 12: Ohaus analytical balance, on marble bench, with current calibration sticker.

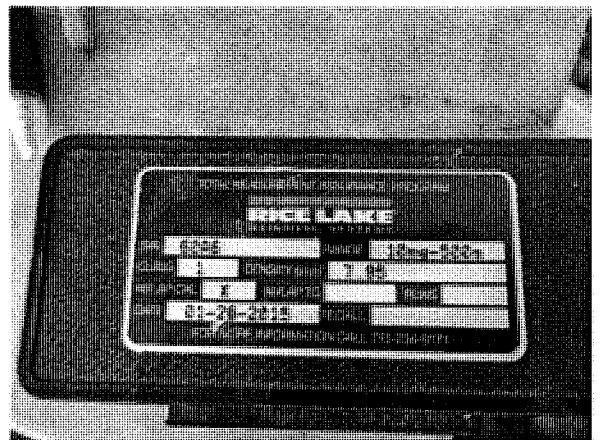


Photo 13: Certified calibration weights used for analytical balance verification weight checks.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

The following field measurement and sampling procedures were followed/evaluated during this Performance Audit Inspection, as applicable:

SESDPROC-306-R3 Wastewater Sampling
SESDPROC-109-R4 Wastewater Flow Measurement
SESDPROC-100-R3 Field pH Measurement
SESDPROC-106-R3 Field Measurement of Dissolved Oxygen
SESDPROC-102-R4 Field Temperature Measurement
SESDPROC-112-R4 Field Screening of Total Residual Chlorine
SESDPROC-101-R5 Field Measurement of Specific Conductance
SESDPROC-110-R4 Global Positioning System
SESDPROC-111-R3 In-Situ Water Quality Monitoring

SESD Wastewater Checklist:

- Method SM5210-B Rev 2001, BOD₅ (CBOD)
- Method SM5220D Chemical Oxygen Demand, Colorimetric
- Method SM2540D-Determination of Non- Filterable Residue (TSS)
- Method SM 4500-H+ B, rev 2000 Determination of pH electrometrically
- Method EPA Method 1664B Oil and Grease
- Sample Management Procedures
- Method EPA Method 360.1 Determination of Dissolved Oxygen (DO)
- Method SM 4500-CL G, rev 2000 Total Residual Chlorine, DPD Colorimetric Method
- Method SM9222D Determination of Fecal Coliform Bacteria by Membrane Filter Procedure
- Method SM 4500-CL G, rev 2000 Total Residual Chlorine, DPD Colorimetric Method

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

APPENDICES

- A. Photo Log. All photos taken by Cornell Gayle, PE (19 Pages)
- B. Laboratory Records and Documentation (17 Pages)
- C. EPA TSS Data (8 Pages)
- D. Tull C. Allen TSS Data (2 Pages)
- E. Formaldehyde Data (10 Pages)
- F. Historical Weather (5 Pages)
- G. Previous ADEM Inspection (8 Pages)

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

A. Photo Log. All photos taken by Cornell Gayle, PE (19 Pages)

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWSB MH
 File Name P1040218.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 90 degrees
 Comments Sampling area enclosure.



Station ID OWSB MH
 File Name P1040219.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 180 degrees
 Comments Custom MH lid. Note the lid leaves space for the sample tubing.

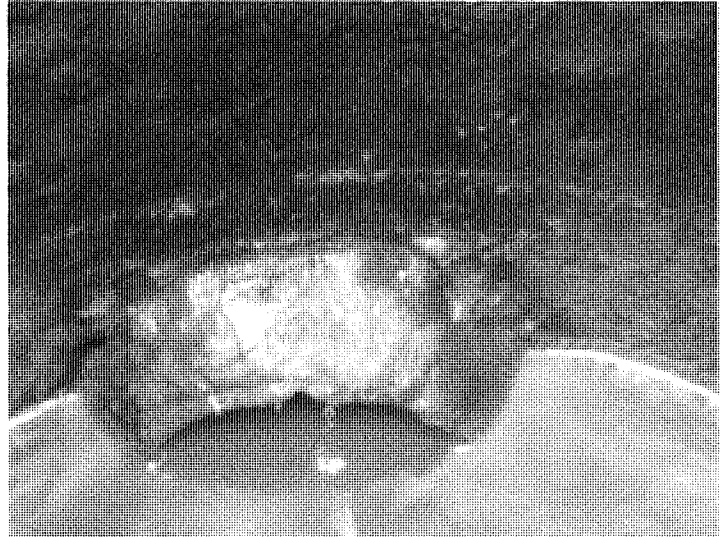


Station ID OWSB MH
 File Name P1040220.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 247.5 degrees
 Comments OWSB sample tubing. Note no sags in tubing line.

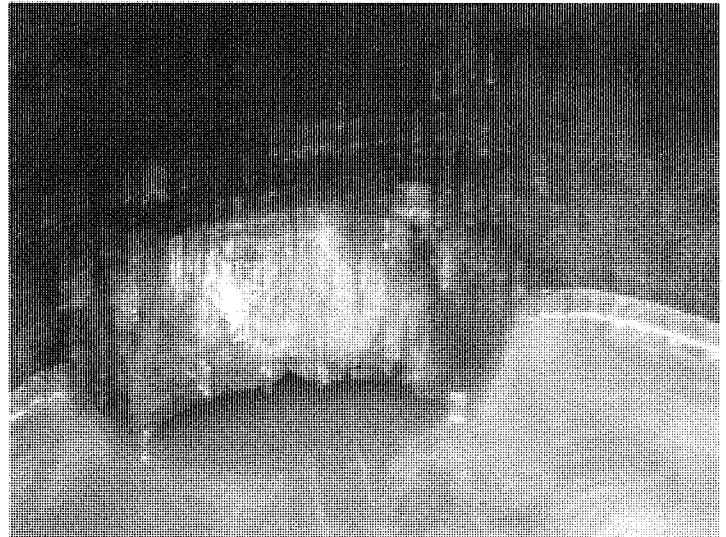


Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

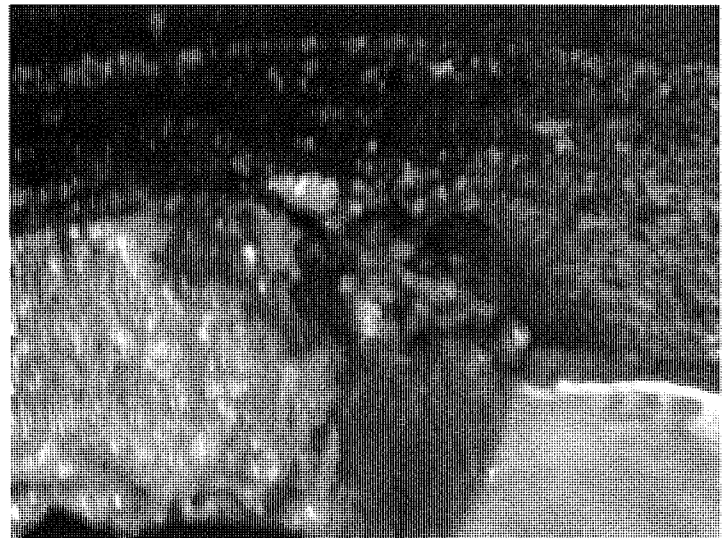
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File Name P1040221.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation degrees
Comments Influent pipe.



Station ID OWSB MH
File Name P1040222.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation 112.5 degrees
Comments Influent pipe.



Station ID OWSB MH
File Name P1040223.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation 112.5 degrees
Comments Groundwater infiltration around influent pipe.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
 File Name P1040218.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 90 degrees
 Comments Sampling area enclosure.



Station ID OWWSB MH
 File Name P1040219.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 180 degrees
 Comments Custom MH lid. Note the lid leaves space for the sample tubing.

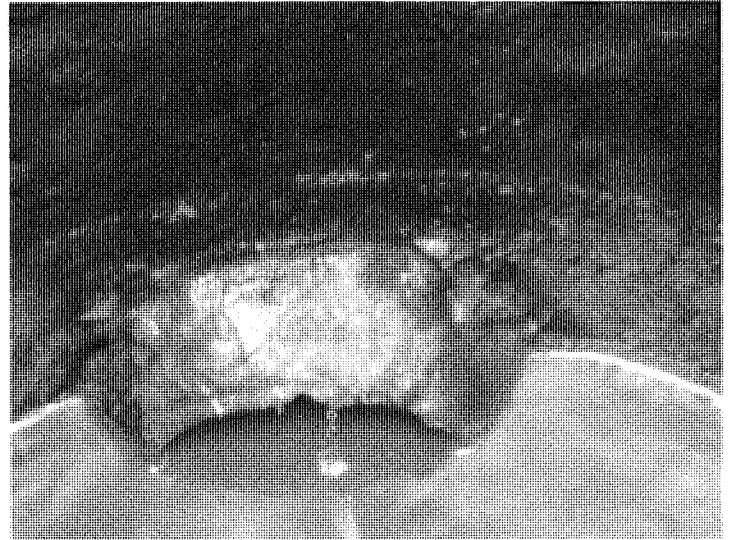


Station ID OWWSB MH
 File Name P1040220.JPG
 Latitude 33.606800° North
 Longitude 85.985711° West
 Orientation 247.5 degrees
 Comments OWWSB sample tubing. Note no sags in tubing line.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

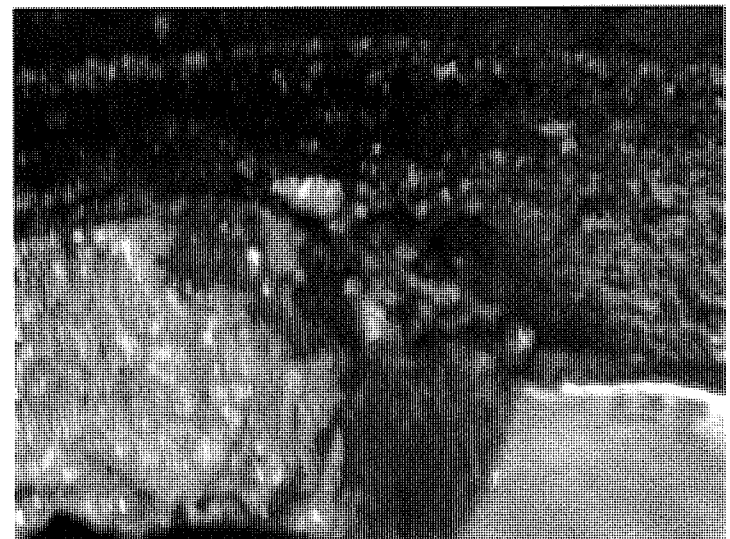
Station ID OWSB MH
File Name P1040221.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation degrees
Comments Influent pipe.



Station ID OWSB MH
File Name P1040222.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation 112.5 degrees
Comments Influent pipe.

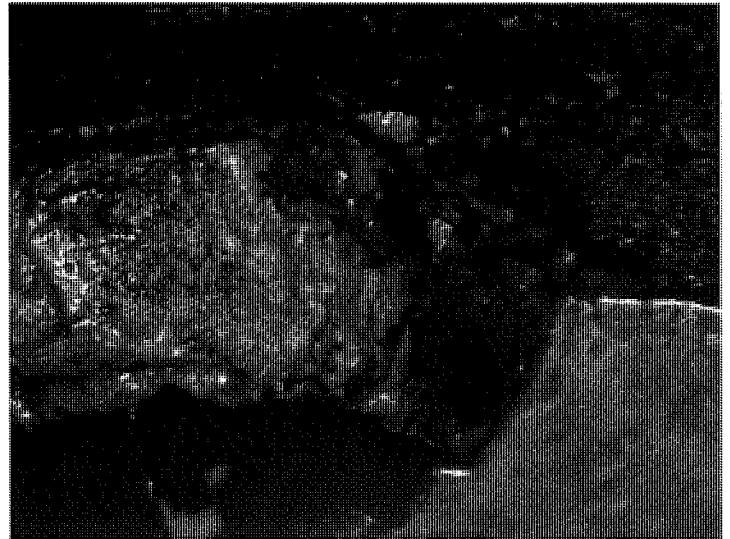


Station ID OWSB MH
File Name P1040223.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation 112.5 degrees
Comments Groundwater infiltration around influent pipe.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

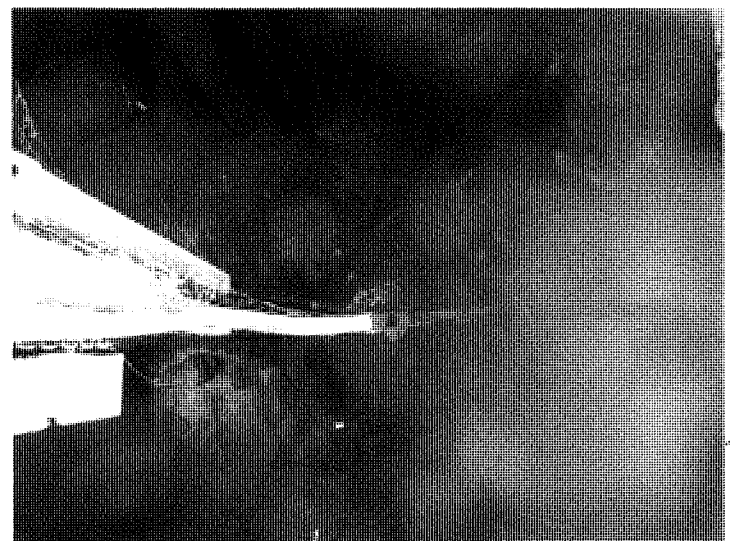
Station ID OWWSB MH
File Name P1040224.JPG
Latitude 33.606800° North
Longitude 85.985711° West
Orientation 135 degrees
Comments Groundwater infiltration around
influent pipe.



Station ID OWWSB Pump Station
File Name P1040225.JPG
Latitude 33.605758° North
Longitude 85.988703° West
Orientation 135 degrees
Comments ~1/2" Black Widow spider on pump
station grate.

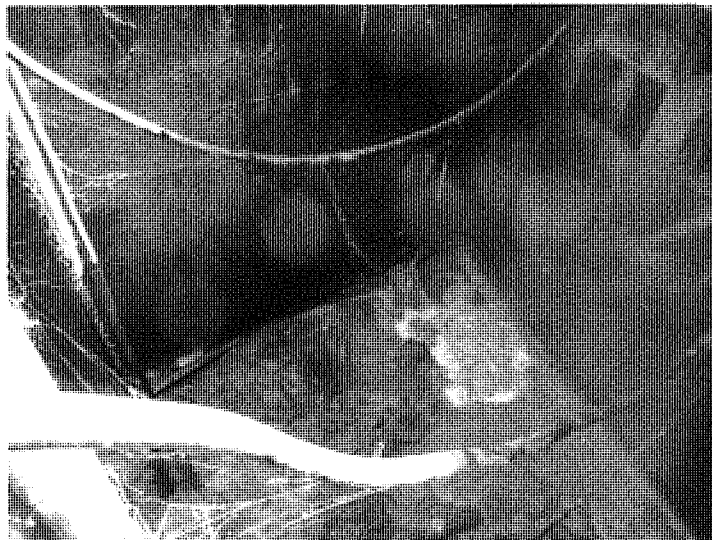


Station ID OWWSB Pump Station
File Name P1040226.JPG
Latitude 33.605842° North
Longitude 85.988667° West
Orientation 67.5 degrees
Comments Wet well above pump floats.

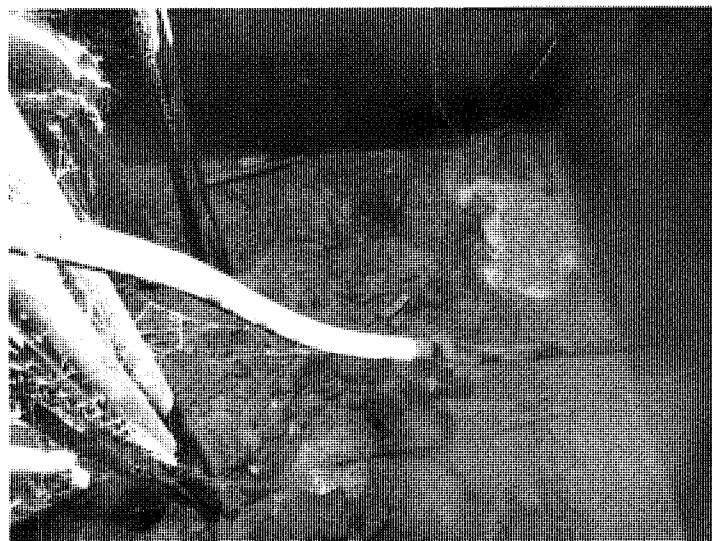


Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWSB Pump Station
File Name P1040227.JPG
Latitude 33.605842° North
Longitude 85.988667° West
Orientation 90 degrees
Comments Influent pipe to wet well. Note the freshly deposited solids versus the older solids in the wet well.



Station ID OWSB Pump Station
File Name P1040228.JPG
Latitude 33.605822° North
Longitude 85.988611° West
Orientation 67.5 degrees
Comments Influent pipe to wet well. Note the freshly deposited solids versus the older solids in the wet well.



Station ID OWSB Pump Station
File Name P1040229.JPG
Latitude 33.605744° North
Longitude 85.988619° West
Orientation 135 degrees
Comments Older foamy looking material in wet well. It is approximately one foot thick.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB Pump Station
 File Name P1040230.JPG
 Latitude 33.605769° North
 Longitude 85.988653° West
 Orientation 180 degrees
 Comments Stringy textured material in wet well.



Station ID OWWSB Pump Station
 File Name P1040231.JPG
 Latitude 33.605769° North
 Longitude 85.988653° West
 Orientation 157.5 degrees
 Comments Bubbly textured material in wet well.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040232.JPG
 Latitude
 Longitude
 Orientation 315 degrees
 Comments Ohaus analytical balance, on marble bench, with current calibration sticker.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

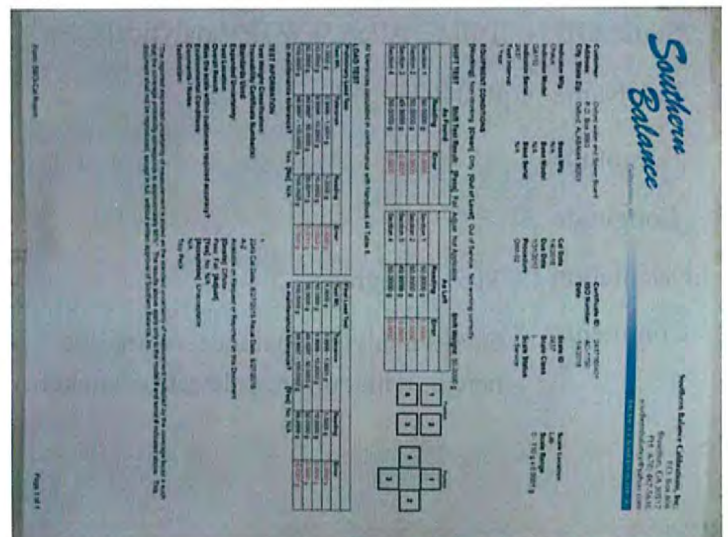
Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040233.JPG
 Latitude
 Longitude
 Orientation 202.5 degrees
 Comments Ohaus analytical balance, leveled on marble bench.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040234.JPG
 Latitude
 Longitude
 Orientation 337.5 degrees
 Comments Ohaus GA110, Four place analytical balance.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040235.JPG
 Latitude
 Longitude
 Orientation 337.5 degrees
 Comments Southern Balance calibration sticker posted on the wall above the analytical balance.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP Analytical Lab

File Name P1040236.JPG

Latitude

Longitude

Orientation 292.5 degrees

Comments Certified calibration weights used for analytical balance verification weight checks.



Station ID Tull C. Allen WWTP Analytical Lab

File Name P1040237.JPG

Latitude

Longitude

Orientation 202.5 degrees

Comments Various consistencies of the material sampled.



Station ID Tull C. Allen WWTP Analytical Lab

File Name P1040238.JPG

Latitude

Longitude

Orientation 45 degrees

Comments Homogenizing sample with an electric hand blender.

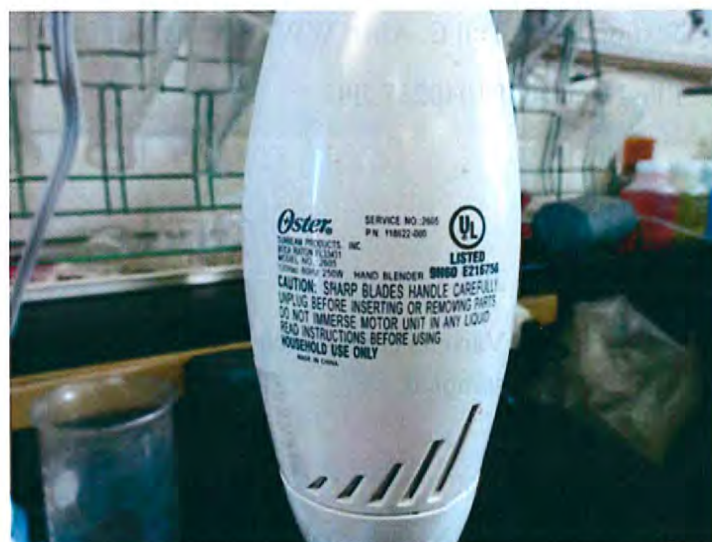


Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040239.JPG
 Latitude
 Longitude
 Orientation 247.5 degrees
 Comments Homogenized sample after using the electric hand blender, note: solids float on the surface.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040240.JPG
 Latitude
 Longitude
 Orientation degrees
 Comments Model number 2605 Oster Hand Blender.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040241.JPG
 Latitude
 Longitude
 Orientation degrees
 Comments Attempting to homogenize unaltered sample with conventional TSS method of magnetic stirring plate.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP Analytical Lab

File Name P1040242.JPG

Latitude

Longitude

Orientation degrees

Comments Visual side by side comparison of homogenized sample on left using the electric hand blender and samples before mixing on right. Note; settled solids on right, floating solids on left after mixing.



Station ID Tull C. Allen WWTP Analytical Lab

File Name P1040243.JPG

Latitude

Longitude

Orientation degrees

Comments Vendor purchased distilled water for laboratory use-photo.



Station ID Tull C. Allen WWTP Analytical Lab

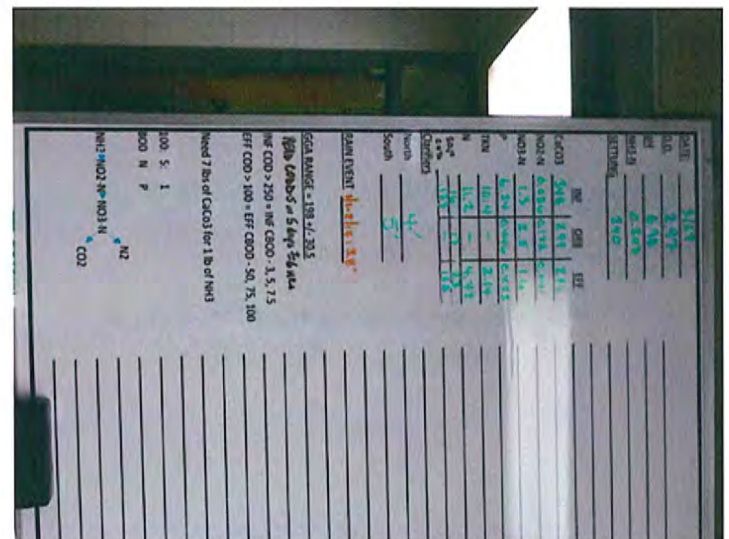
File Name P1040244.JPG

Latitude

Longitude

Orientation 180 degrees

Comments Daily plant operating criteria posted on visual board for facility staff photo.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP
File Name P1040245.JPG
Latitude 33.583972° North
Longitude 85.906078° West
Orientation 247.5 degrees
Comments Pump Station influent arriving at WWTP.



Station ID Tull C. Allen WWTP
File Name P1040246.JPG
Latitude 33.583972° North
Longitude 85.906078° West
Orientation 225 degrees
Comments Pump Station influent arriving at WWTP.



Station ID Tull C. Allen WWTP
File Name P1040247.JPG
Latitude 33.583972° North
Longitude 85.906078° West
Orientation 247.5 degrees
Comments Pump Station influent arriving at WWTP.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

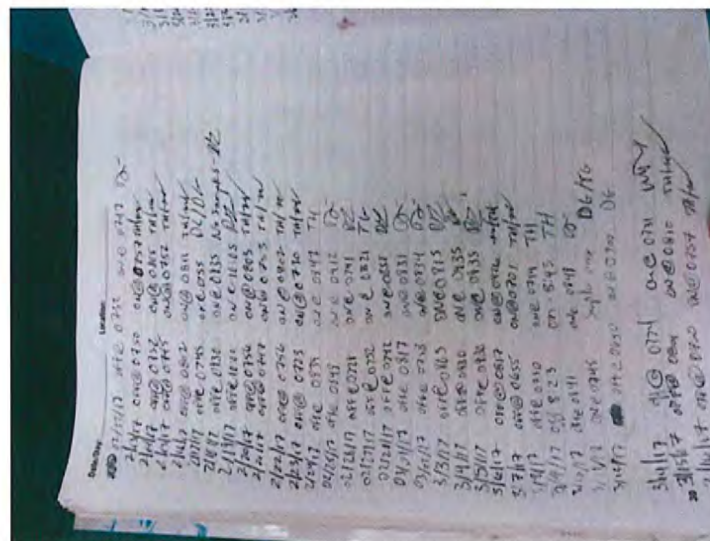
Station ID Tull C. Allen WWTP
 File Name P1040248.JPG
 Latitude 33.583972° North
 Longitude 85.906078° West
 Orientation 180 degrees
 Comments Pump Station influent arriving at WWTP.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040249.JPG
 Latitude 33.583539° North
 Longitude 85.906050° West
 Orientation 292.5 degrees
 Comments Ohaus analytical balance, on marble bench, with desiccator.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040250.JPG
 Latitude 33.582625° North
 Longitude 85.905386° West
 Orientation 67.5 degrees
 Comments Automatic sampler logbook.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040251.JPG
 Latitude 33.583408° North
 Longitude 85.905569° West
 Orientation degrees
 Comments Demonstration of the bi-phase characteristics of the sample.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040252.JPG
 Latitude 33.583408° North
 Longitude 85.905569° West
 Orientation 45 degrees
 Comments pH buffers



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040253.JPG
 Latitude 33.584033° North
 Longitude 85.906064° West
 Orientation degrees
 Comments Facility pH and DO meter.

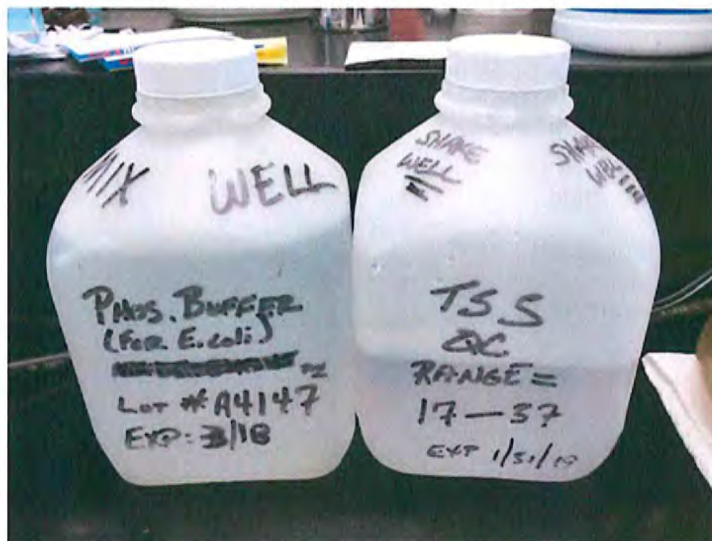


Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040254.JPG
 Latitude 33.584033° North
 Longitude 85.906064° West
 Orientation 180 degrees
 Comments Facility pH and DO meter.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040255.JPG
 Latitude 33.584033° North
 Longitude 85.906064° West
 Orientation 315 degrees
 Comments e.Coli and TSS standards.



Station ID Tull C. Allen WWTP Analytical Lab
 File Name P1040256.JPG
 Latitude
 Longitude
 Orientation 270 degrees
 Comments New incubator purchased for laboratory use, and refrigerator on right.



[illegible]

TEMPERATURE °C

20.0

Heater On

ENTER

Set Temp/Cal

High/Low Limit

Mute

- Actual Temperature
- Set Temperature
- Calibration
- High Temperature Alarm/Set Point
- Low Temperature Alarm/Set Point
- Alarm Condition

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
File Name P1040260.JPG
Latitude 33.606983° North
Longitude 85.985908° West
Orientation 112.5 degrees
Comments EPA composite sample after 24 hours.



Station ID OWWSB MH
File Name P1040261.JPG
Latitude 33.606983° North
Longitude 85.985908° West
Orientation 135 degrees
Comments EPA composite sample after 24 hours.



Station ID OWWSB MH
File Name P1040262.JPG
Latitude 33.606917° North
Longitude 85.985878° West
Orientation 45 degrees
Comments Duplicate and split samples.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
File Name P1040263.JPG
Latitude 33.606917° North
Longitude 85.985878° West
Orientation 45 degrees
Comments Duplicate and split samples.



Station ID OWWSB MH
File Name P1040264.JPG
Latitude 33.607908° North
Longitude 85.985833° West
Orientation 45 degrees
Comments Duplicate and split samples.



Station ID OWWSB MH
File Name P1040265.JPG
Latitude 33.607047° North
Longitude 85.985828° West
Orientation 90 degrees
Comments Duplicate and split samples. Note the foam on top of the sample.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
File Name P1040266.JPG
Latitude 33.607050° North
Longitude 85.986047° West
Orientation 22.5 degrees
Comments Debris collected around EPA sample tubing.



Station ID OWWSB MH
File Name P1040267.JPG
Latitude 33.607053° North
Longitude 85.986231° West
Orientation 45 degrees
Comments Debris collected around EPA sample tubing.



Station ID OWWSB MH
File Name P1040268.JPG
Latitude 33.607008° North
Longitude 85.986064° West
Orientation 90 degrees
Comments Debris collected around EPA sample tubing.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
File Name P1040269.JPG
Latitude 33.607008° North
Longitude 85.986064° West
Orientation 90 degrees
Comments Debris removed from sample tubing.



Station ID OWWSB MH
File Name P1040270.JPG
Latitude 33.607064° North
Longitude 85.985867° West
Orientation 90 degrees
Comments Debris removed from sample tubing.

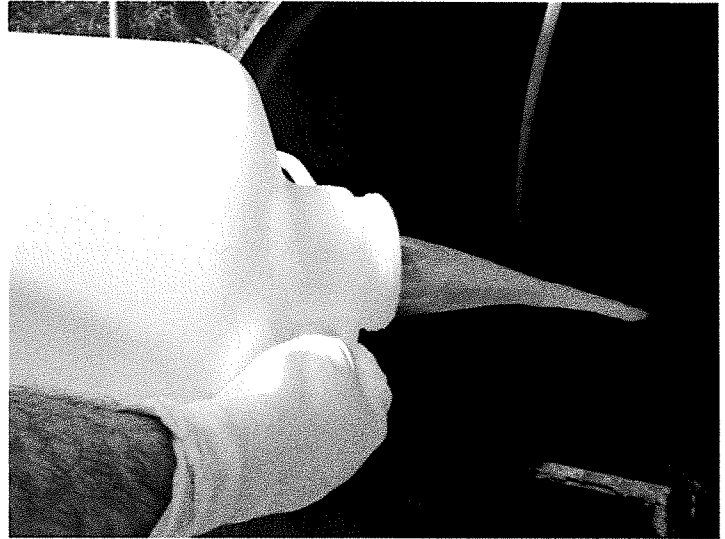


Station ID OWWSB MH
File Name P1040271.JPG
Latitude 33.607044° North
Longitude 85.986114° West
Orientation 67.5 degrees
Comments Foam and solid material in EPA composite sample container.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Station ID OWWSB MH
File Name P1040272.JPG
Latitude 33.607058° North
Longitude 85.986011° West
Orientation 112.5 degrees
Comments Disposal of remaining sample in manhole.



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

B. Laboratory Records and Documentation (17 Pages)

Opening Conference

Facility/Laboratory: OWSIS - BAZZAN STREET

Personnel in Opening Meeting:

[illegible]

10/5/16

9,000 WAS ~ ~~2~~
wheels in Orbital turned off for Approx. ~~1 Hour~~ ^{1 Hour}
0730 - 0830 ~~2~~

10/6/16

Turner #7, Acts on @ ~~0700~~ ⁰⁷⁰⁰ while ~~2~~
Increased blow air from 81% to 85% ~~2~~
WAS @ 9000 ~~2~~

Nutrients added 0800 ~~2~~

Nutrients added 0300 ~~2~~

Orbital EFF GATE RAISED from 9" to 10" ~~2~~ 0815

LOGBOOK ENTRY - WFS

10/7/16

WAS Set at 10,000 ~~2~~

Kronospan Sampler now moved to Bridgewater. ~~2~~

10/8/16

During daily checks I smelled a strong "Kronospan"
odor. I noticed astringy-Kronospan build-up on the
bar screen. The Anger had a crusty black-
buildup. I opened 202 → EQ and closed 202-H.W.
at 8:45 a.m. ~~2~~

WAS SET AT 11,000 ~~2~~

10/9/16

WAS SET AT 11,000 ~~2~~

10/10/16

← ~~WAS~~ BLENDING STARTED ON THIS DATE

WAS Set at 10,000 ~~2~~

Began Tape Craft prep @ 0730

202 → Headworks opened > 0830 ~~2~~

202 → EQ Basin Closed

50 Inside and middle wheels turned off at 1045

Then turned on at 1130

FILE COPY

Date/Day: 10/10/16Location: TCAWWTP

LOGBOOK ENTRY - WFS

0200 - in / Prep
 0230 - Sample Collection
 0245 - Begin Daily Testing
 0330 - Ctz
 0340 - TSS in heater (105°C)
 0440 - TSS out of " (105°C)
 0530 - Make up CBOD-5 and soln
 0600 - Read CBOD/BOD study / CBOD-5 for lab
 0645 - Color Analyzing
 0800 - CBOD-5 read / in inc.
 0830 - Ksp - Testing / mixed w/ blender
 0940 - " TSS complete / Aliquots for TTR.
 1045 - " testing complete / Results / Emailed
 1100 - Out

10/11/16TCAWWTP

FILE COPY

0200 - in / Prep
 0230 - Sample Collection
 0245 - Begin off day Testing
 0320 - TSS in heater (105°C)
 0430 - " out of heater (105°C)
 0500 - make up CBOD-5 soln for read (105°C)
 0545 - Read Study CBOD-5 / BOD-5
 0600 - when in inc.
 0830 - Ksp - Testing
 1045 - " complete / Results / Emailed
 1100 - Out

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

MOVED TO BRIDGE UNDER PAPER SAMPLE # 5 - YES

Kronospan Hourly TSS Started at 0729 OCT 06 through 07 OCT 0740 Left to Right

The first 5 bottles from the left side were collected from the 202 lift station. Every bottle beyond that was collected from the new sampling point that is from only K



FILE COPY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX	MIN	AVG
1211	1680	1295	1193	1780	1235	3040	1020	4530	1630	1370	985	899	2800	1730	1050	4350	4300	1840	845	321	191	270	215	4530	191	1658

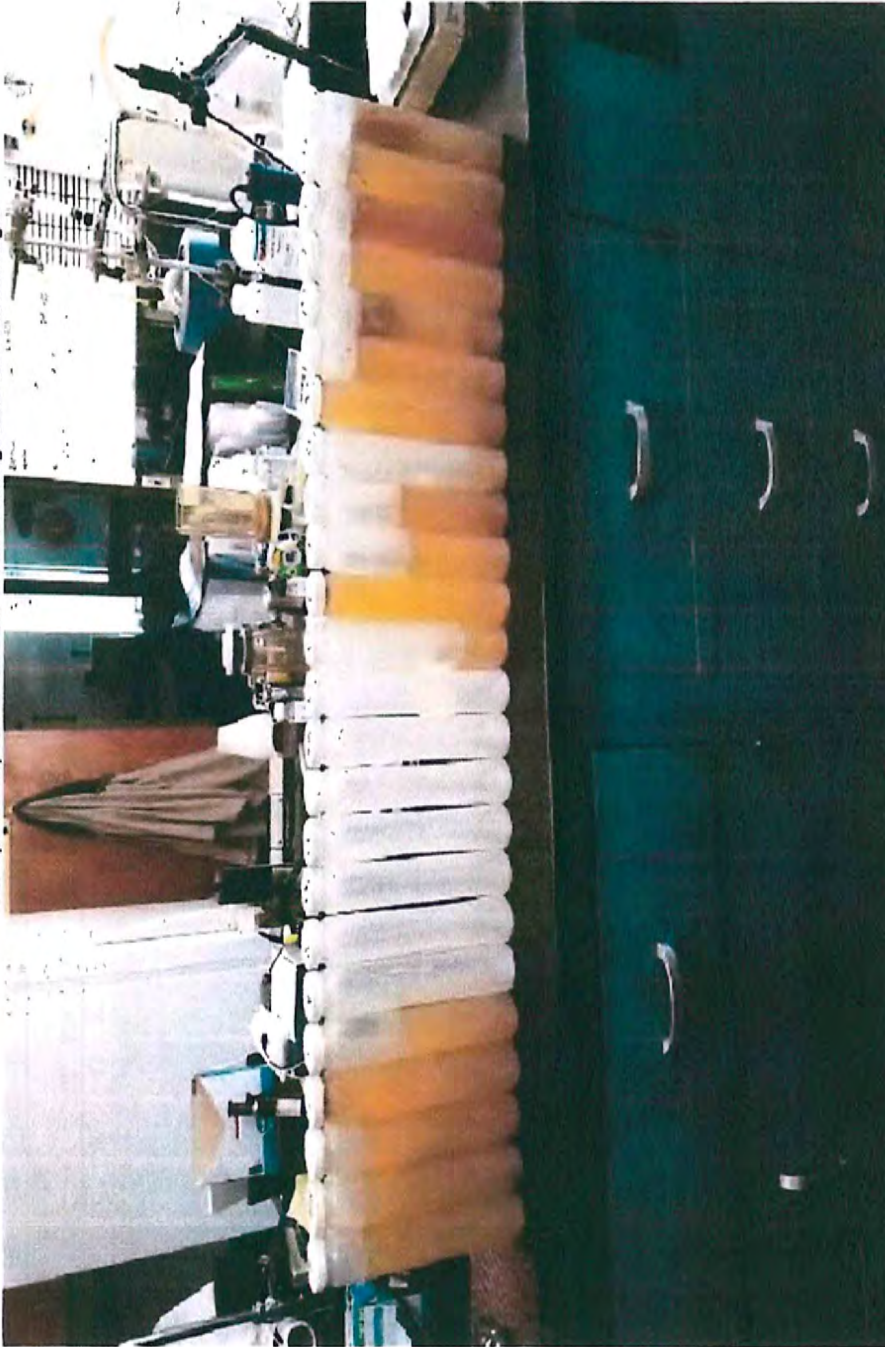
24 HR COMPOSITE

TEMP	PH	TSS	NH3	P	COLOR	HCHO	COD
88.6	6.56	2370	1.38	5.83	3874		2710

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

2

Kronospan Hourly TSS Started at 0745 OCT 07 through 1030 OCT 08 Left to Right



FILE COPY

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX	MIN	AVG
1120	584	616	537	404								333	97	195	3040	474	2410	2350	1548	960	181	133	3410	3410	97	1082

24 HR COMPOSITE

TEMP	PH	TSS	NH3	P	COLOR	HCHO	COD
89.1	6.58	3820	1.66				

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Kronospan Hourly TSS Started at 1040 OCT 08 through 1040 OCT 09 Left to Right



FILE COPY

24 HR COMPOSITE																								MAX	MIN	AVG					
TEMP	PH	TSS	NH3	P	COLOR	HCHO	COD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
88.3		6.52	290	1.97				349	1461	2170	410	178	169	245	182	149	163	167	877	98	191	81	110	109	663	95	164	154	124	143	182
																								2170	81	360					

Kronospan Hourly TSS Started at 0810 OCT 10 through 0800 OCT 11 Left to Right

***HIGH AMOUNTS OF FIBRUS MATERIAL IN SPECIMENS; INTERPRET VALUES WITH CAUTION.



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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MAX	MIN	AVG
	349	1852	1568	1684	1740	1694	1566	1880	714	731	600	726	497	497	497	497	497	497	497	497	497	497	497	497	1880	349	1200
RESULTS FROM FILTERED TSS ANALYSIS																											
	930	4120	1130	770	5030	5890	4500	3730	1540	5050	650	1030	740	740	740	740	740	740	740	740	740	740	740	740	5890	650	2701

SIDE BY SIDE COMPARISON

INSPECTION OF OXFORD WATER WORKS AND
SUPERVISOR'S REPORT

FILE COPY

OVEN	
TIME IN	13:05
OVEN TEMP	110
TIME OUT	14:05
OVEN TEMP	110

*ANALYSIS	
ANALYZED BY: TG	
DATE: 3/28/2017	
TIME: 15:20	

KRONSPAN SUPENDED SOLIDS DATA
STANDARD METHODS 2540 SOLIDS (Editorial Revisions, 2011) METHOD: FILTER

♦♦♦TOTAL SUSPENDED SOLIDS PERFORMED ON 24 HR COMPOSITE ONLY DUE TO HIGH SOLIDS VOLUME IN HOURLY SAMPLES.

TYPE		24HC																								42	% VSS 24HC	
RUN NUMBER	QC-1	QC-2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	24HC	
KNOWN	0	17-37																										
WT. OF FILTER & SOLIDS	→	0.1397	0.139																								0.2644	0.2103
WT. OF FILTER	→	0.1397	0.138																								0.1345	0.1345
WT. OF SOLIDS	→	0	0.0005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1299	0.0758
ML. OF SAMPLE	→	25	25	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
SUSPENDED SOLIDS MG/L PASS(P)	→	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12990	7580
FAIL (F)																											135↑	F55↑
AVERAGE→			0		ALL SAMPLES STIRRED FOR ANALYSIS																				5410	V55↑		

*All samples cooled in desiccator before analysis

To the best of my knowledge and belief, the information contained in this report is true, accurate and complete

NIM GASKINS, 03/28/2017

SUSPENDED SOLIDS - EXAMPLE DATA SHEET - JF 3

SUSPENDED SOLIDS DATA

STANDARD METHODS 2540 SOLIDS (Editorial Revisions, 2011) METHOD: FILTER

FILE COPY

INFLUENT

24HC SAMPLE (field)	DATE	TIME
START	3/27/2017	2:40
PULLED	3/28/2017	2:40

EFFLUENT

24HC SAMPLE (field)	DATE	TIME
START	3/27/2017	2:30
PULLED	3/28/2017	2:30

OVEN	TIME IN	3:40
OVEN TEMP	105	
TIME OUT	4:40	
OVEN TEMP	105	

* ANALYSIS	ANALYZED BY: ML
DATE:	3/28/2017
TIME:	5:15

TYPE

24HC

95	% REMOVAL	26	% VSS ORBAL
----	-----------	----	-------------

RUN NUMBER	QC-1	QC-2	INF-1	INF-2	EFF-1	EFF-2	RAS	OUTER	MIDDLE	SOUTH CL.	NORTH CL.	ORBAL	ORBAL
KNOWN	0	17-37											
WT. OF FILTER & SOLIDS	→	0.1397	0.139	0.1447	0.1465	0.1415	0.1399	0.2608	0.197	0.2016	0.1708	0.1637	0.1991 0.1833
WT. OF FILTER	→	0.1397	0.138	0.1384	0.1393	0.1407	0.1393	0.1385	0.1365	0.1394	0.1393	0.1372	0.1387 0.1387
WT. OF SOLIDS	→	0	5E-04	0.0063	0.0072	0.0008	0.0006	0.1223	0.0605	0.0622	0.0315	0.0265	0.0604 0.0446
ML. OF SAMPLE	→	25	25	50	50	100	100	25	25	25	25	25	25 25
SUSPENDED SOLIDS MG/L	→	0	20	126	144	8	6	4892	2420	2488	1260	1060	2416 1784
PASS(P)	FAIL (F)	P	P										MLSS↑ FSS↑
AVERAGE →				135									632 VSS↑

*All samples cooled in desiccator before analysis

"X" = STIRRED SAMPLES

To the best of my knowledge and belief, the information contained in this report is true, accurate and complete



319 Temp = 104

IN @ 0545	OUT @ 0645	OUT @ 0730
B1: 0.1395	0.1395	0.1395
Q1: 0.1364	0.1368	0.1368
I1: 0.1405	0.1487	0.1487
"2: 0.1344	0.1426	0.1426
E1: 0.1361	0.1376	0.1376
"2: 0.1373	0.1387	0.1387
RAS: 0.1372	0.3269	0.3269
OUT: 0.1400	0.2164	0.2164
MIS: 0.1379	0.2097	0.2097
⑤: 0.1380	0.3095	0.3095
⑥: 0.1370	0.4202	0.4202
	OUT @ 0805	
	0.2234	
ORB: 0.1390	0.2234	0.2018

PRINTING COMPRESSION
FOR MULTIPLE WEIGHTS
0545 / 0645 / AND 0730
- WES

FILE COPY

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Bobby

Subject: 202 LIFT

Status: Not Started

Percent Complete: 0%

Total Work: 0 hours

Actual Work: 0 hours

Owner: Bobby Smith

eg 3/29/17

INSPECTION 10-26-16 NEW BATTERY 10-26-16

1 pump FLYGT 3171.185— 1410047 emp. 275 35 hp 3520 rpm 39 amp

#2 pump FLYGT 3171.181—1160154 emp. 275 35 hp 3520 rpm 39 amp

#3-PUMP X PUMP 80 HP 460 VOLT 4" DISCHARGE

#4-PUMP X PUMP 80 HP 460 VOLT 4" DISCHARGE

Rebuild # 1 pump 6-9-10 32HP K 89 SN. 89000513 - SEAL # 352169 BEARING # 3310A & 62306 - REBUILD # 2 PUMP 6-8-11 - REBUILD # 1 PUMP 8-26-11

REBUILD # 2 PUMP 1-27-14 - CHECK 80 HP 3-3-16 - NEW PUMP #1 INSTALLED 4-21-14 - replace empeller

#1- pump 11-1-16

25,000 split between Anniston & OXFORD

4,170 RESIDENTIAL CUSTOMERS (~2.5 people per household)

7 INDUSTRIAL

~3.5MGD ± 0.5MGD INFLUENT

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pH BENCH SHEET

PH CALIBRATION

DATE:	<u>3/29/2017</u>	TIME	<u>2:00</u>	ANALYST	<u>ML</u>
BUFFER # 4 ANALYZED VALUE:	<u>4.01</u>	TEMP:	<u>23.1</u>	TIME	<u>2:00</u>
BUFFER # 7 ANALYZED VALUE:	<u>7.02</u>	TEMP:	<u>23</u>	TIME	<u>2:02</u>
BUFFER # 10 ANALYZED VALUE:	<u>10.03</u>	TEMP:	<u>23</u>	TIME	<u>2:03</u>
IN BUFFER SOLUTION # 7:	<u>7.06</u>				

STANDARD METHODS 4500 H+_{PH} (Editorial Revisions 2011)/HACH HQ 440d

SAMPLE I.D.: INFLUENT
 TIME SAMPLED: 2:40
 TIME ANALYZED: 2:50
 PH: 6.72

DATE 3/29/2017

ANALYZED BY: ML
 TEMP: 19.3

SAMPLE I.D.: EFFLUENT
 TIME SAMPLED: 2:30
 TIME ANALYZED: 2:43
 PH: 6.86

DATE 3/29/2017

ANALYZED BY: ML
 TEMP: 18.5

SAMPLE I.D.: ORBAL
 TIME SAMPLED: 2:35
 TIME ANALYZED: 2:45
 PH: 6.98

DATE 3/29/2017

ANALYZED BY: ML
 TEMP: 18.6

FILE COPY

To the best of my knowledge and belief, the information contained in this report is true, accurate and complete



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

STANDARD OPERATING PROCEDURE

TSS

FILE COPY

I: PURPOSE: To determine the Total Suspended Solids in various samples, MLSS and MLVSS.

II: SPECIMEN COLLECTION

1. 24 HR Composite Influent and Effluent Sample
2. Grab Sample from Inner, Middle and Outer channels of the Orbal.

III: SET UP

1. Dry filters for Blank, QC, Influent 1, Influent 2, Effluent 1, Effluent 2, RAS, Outer, Middle, Inner Orbital channels, South Clarifier and North Clarifier in heater with temperature of 103-105 degrees C for a minimum of one hour. Preferably, overnight.

IV: MEASUREMENTS

1. Weigh all filters and record weight for each.
2. Place filter on suction device and add:
 - a. Blank: add nothing
 - b. QC1: 25ml
 - c. 24 hr INFLUENT (x2): 50 ml
 - d. 24 hr EFFLUENT (x2): 100ml
 - e. RAS: 25ml
 - f. Outer channel: 25ml
 - g. Middle channel: 25ml
 - h. South Clarifier: 25ml
 - i. North Clarifier: 25ml
 - j. Inner Channel: 25ml
3. Allow each to suction until only solids are left on filter paper.
4. After filtration, place filter papers into heater at 103-105 degrees C for one hour.
5. Remove filters and weigh each and record weights.
6. Place filters back into heater for 30 minutes.
7. Remove filters and weigh each until weight is within 5% of previous weight.
8. **NOTE:** IN-HOUSE EXTENDED STUDIES HAVE SHOWN THAT ALL FILTERS ARE DRIED COMPLETELY AFTER ONE HOUR.

V: RESULTS

1. Record initial weights of dried filters on worksheet
2. Record weights of filters plus dried solids on worksheet.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

3. Worksheet will perform calculations to determine the amount of TSS for each individual sample.

VI: MLVSS

1. After reading weight of inner channel of Orbal filter plus dried solids, place filter in 550 degree F heater for 15 minutes.
2. Remove filter plus remaining solids to desiccator and allow to cool to room temp (approx 30 min.)
3. Weigh filter paper and enter results into TSS worksheet to calculate MLVSS.

VII: Validity of Test

1. If QC1 fails, test is not valid.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP
STANDARD OPERATING PROCEDURE

Kronospan

FILE COPY

1. Purpose: To determine the TSS, PH, TEMP, NH3, PHOSPHORUS, COLOR AND COD of the Kronospan waste water.
2. Sample Collection:
 - 2.1. Items needed: Portable P.H. meter, PPE gloves, Large cooler with replacement bottles and caps and Portable battery (incase battery has died and needs replacing)
 - 2.2. Open gate to the sampling site and remove lid from ISCO 3710 portable sampler. Make sure that the display reads that the, "Program is Completed."
 - 2.3. Remove 2nd lid and see that all 24 bottles were appropriately filled. Place each lid from the cooler to the corresponding bottle in the sampler. Remove full bottles and replace with the clean, empty bottles. Place full sample bottles into cooler.
 - 2.4. Make sure all 24 bottles are secure and correctly placed in the sampler. Put 2nd lid back on and lock it in place. Press the up button twice and press enter on the "RUN" option. If it prompts you to select bottle number to start on, select "01". The sampler should start immediately.
 - 2.5. Place top lid on and avoid kinking any hose.
 - 2.6. Lower the P.H. meter into the manhole and get a reading inside the water. Record measurement in the Daily Kronospan workbook.
 - 2.7. Lock the gate and return to the plant.
3. Sample Prep:
 - 3.1. When you get back to the plant line up all of the bottles in hourly chronological order and take a photo of them.
 - 3.2. Get smaller cooler that smaller numbered sampling bottles from the lab.
 - 3.3. Shake large sample bottles and fill the corresponding small bottles. Pour the remainder of every each bottle into a blue container labeled "K-span Composite". When all bottles are completed, vigorously shake

STANDARD OPERATING PROCEDURE**FILE COPY**

composite container and pour into a sample bottled labeled composite. Pour the remainder of that into the E.Q. Basin.

- 3.4. Place all large sample bottles back into the large cooler for later cleaning.
- 3.5. Place small bottles into the small cooler with the composite sample bottle. Then take the cooler inside the lab for analysis.

4. Set Up:

- 4.1. Dry filters for Blank, QC, TSS and 24 others for the different hours. Place them in the heater with a temperature of 103-105 degrees C for a minimum of one hour. Preferably, overnight.

5. Measurements:

- 5.1. Weigh all filters and record weight for each.
- 5.2. Place filter on suction device and add:
 - a. Blank: add nothing
 - b. QC1: 25ML
 - c. TSS COMP: 10ml
 - d. 1-24: 10 ml
- 5.3. Allow each to suction until only solids are left on filter paper.
- 5.4. After filtration, place filter papers into heater at 103-105 degrees C for one hour.
- 5.5. Remove filters and weigh each and record weights.
- 5.6. If needed place TSS paper into smaller oven for 15 more minutes. Take out and re-measure for VSS.
- 5.7. Upload pictures of bottles to computer and insert into Kronospan Daily Workbook.
- 5.8. Place 0.5 ml of composite sample in a TNT 831 Ammonia (Low Range) tube. Shake well and read in 15 minutes.
- 5.9. Place 0.3 ml of composite sample in a TNT 823 COD (High Range) tube. Shake well and place in HACH DRB 200 FOR 120 minutes at 120 degrees C. When time has elapsed place tube in after incubation places tubes in the BOD incubator for 15 minutes, so that the tubes cool to 20.0 degrees Celsius. Remove the tubes and place them in the HACH DR2800 spectrophotometer for analysis.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

STANDARD OPERATING PROCEDURE

- 5.10. Place 0.4 ml of composite in TNT 845 Phosphorus tube shake well and put in HACH DRB 200 FOR 60 minutes at 100 degrees C. Take out after elapsed time and let cool. Then place 0.5 ml of B inside test kit inside of tube and place the C cap on it and shake well. After 10 minutes read in the HACH DR2800 for analysis.
- 5.11. Zero the Lexibond PFX195 Tintometer using 25 ml of D.I. water.
- 5.12. Dilute 5 ml of the composite sample in a 100 ml cylinder with D.I. water. (1 to 20 dilution) Pour 25 ml from the cylinder into a Tintometer vial, then read. Multiply your result by 20 to get the actual value.
6. Recording Results:
 - 6.1. Record initial weights of dried filters on worksheet.
 - 6.2. Record weights of filters plus dried solids on worksheet.
 - 6.3. Record NH3 value on worksheet.
 - 6.4. Record COD value on worksheet.
 - 6.5. Record Phosphorus value on worksheet.
 - 6.6. Record Color value on worksheet.
 - 6.7. Save work sheet and save duplicate worksheet in a PDF format.
 - 6.8. Send PDF worksheet to appropriate people via email.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

C. EPA TSS Data (8 Pages)

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

April 10, 2017

4SESD-ASB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 17-0286, Oxford Water Works and Sewer Board
Compliance Monitoring

FROM: Daniel Adams
ICS Analyst

THRU: Floyd Wellborn, Chief
ASB Inorganic Chemistry Section

TO: Cornell Gayle

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Analytical Support Branch's (ASB) Laboratory Operations and Quality Assurance Manual (ASB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the ASB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Section 5.2 of the ASB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

Classical/Nutrient Analyses (CNA)

Solids

USGS I-3765-85 (Water)

ISO

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

Sample Disposal Policy

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov, and provide a reason for holding samples beyond 60 days

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



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D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

SAMPLES INCLUDED IN THIS REPORT

Project: 17-0286, Oxford Water Works and Sewer Board

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
MH	E171301-01	Wastewater	3/29/17 10:50	3/30/17 7:45
MHD	E171301-02	Wastewater	3/29/17 10:50	3/30/17 7:45

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



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DATA QUALIFIER DEFINITIONS

None

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at:
<http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd>

NR The EPA Region 4 Laboratory has not requested accreditation for this test.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

Classical/Nutrient Analyses**Project: 17-0286, Oxford Water Works and Sewer Board****Sample ID:** MH**Lab ID:** E171301-01**Station ID:** OWWSB**Matrix:** Wastewater**Date Collected:** 3/29/17 10:50

Lab ID	Analyte	Result	Qualifier	Unit	MRL	Prepared	Analyzed	Method
E1642818	Total Suspended Solids	580		mg/L	4.0	4/5/17 14:42	4/10/17 9:32	USEPA 8-3165-85

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



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Region 4 Science and Ecosystem Support Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

Classical/Nutrient Analyses**Project: 17-0286, Oxford Water Works and Sewer Board****Sample ID:** MHD**Lab ID:** E171301-02**Station ID:** OWWSB**Matrix:** Wastewater**Date Collected:** 3/29/17 10:50

CAS Number	Analyte	Result	Qualifier	Unit	MR	Prepared	Analyzed	Method
E1642818	Total Suspended Solids	320		mg/L	4.0	4/06/17 14:43	4/06/17 9:32	USEPA 8-3795-85

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



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D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1704003 - C 2540 Solids										
Blank (1704003-BLK1)				Prepared: 04/04/17 Analyzed: 04/05/17						
USGS I-3765-85										
Total Suspended Solids	U	4.0	mg/L							U
LCS (1704003-BS1)				Prepared: 04/04/17 Analyzed: 04/05/17						
USGS I-3765-85										
Total Suspended Solids	90.300	4.0	mg/L	100.00		90.3	77.1-110			
LCS Dup (1704003-BSD1)				Prepared: 04/04/17 Analyzed: 04/05/17						
USGS I-3765-85										
Total Suspended Solids	91.200	4.0	mg/L	100.00		91.2	77.1-110	0.992	10	
Duplicate (1704003-DUP1)				Source: E171301-01		Prepared: 04/04/17 Analyzed: 04/05/17				
USGS I-3765-85										
Total Suspended Solids	639.50	4.0	mg/L		584.00			9.07	10	
MRL Verification (1704003-PS1)				Prepared: 04/04/17 Analyzed: 04/05/17						
USGS I-3765-85										
Total Suspended Solids	4.1000	4.0	mg/L	5.0000		82.0	57.1-130			MRL-2

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP



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D.A.R.T. Id: 17-0286

Project: 17-0286, Oxford Water Works and Sewer Board - Reported by Daniel Adams

Notes and Definitions for QC Samples

- U The analyte was not detected at or above the reporting limit.
- MRL-2 MRL verification for Non-Potable Water matrix

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

D. Tull C. Allen TSS Data (2 Pages)

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

KRONOSPAN SUPENDED SOLIDS DATA - SAMPLED BY EPA, AND SPLIT - CHAIN OF CUSTODY AVAILABLE
STANDARD METHODS 2540 SOLIDS (22nd Edition, 2012) METHOD: FILTER

24HC SAMPLE (field)	
MANHOLE LOCATED: CORNER OF BW	
DATE	TIME
3/28/2017	11:00
PULLED	3/29/2017 10:50

OVEN	
TIME IN	14:05
OVEN TEMP	105
TIME OUT	15:05
OVEN TEMP	105

*ANALYSIS	
ANALYZED BY:	TG
DATE:	3/29/2017
TIME:	15:55

41	% VSS 24HC
----	------------

RUN NUMBER	QC-1	QC-2	24HC
KNOWN	0	12-30	
WT. OF FILTER & SOLIDS	0.1398	0.1359	0.1818 0.1635
WT. OF FILTER	0.1398	0.1353	0.1373 0.1373
WT. OF SOLIDS	0	0.0006	0.0445 0.0262
ML. OF SAMPLE	25	25	25 25
SUSPENDED SOLIDS MG/L	0	24	1780 1048
PASS(P)	P	P	TSS↑ FSS↑
SAMPLE STIRRED FOR ANALYSIS			
*All samples cooled in desiccator before analysis			
			732 VSS↑

To the best of my knowledge and belief, the information contained in this report is true, accurate and complete



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

KRONOSPAN SUPENDED SOLIDS DATA - SAMPLED BY EPA, AND SPLIT - CHAIN OF CUSTODY AVAILABLE
 STANDARD METHODS 2540 SOLIDS (22nd Edition, 2012) METHOD: FILTER

24HC SAMPLE (field)	
MANHOLE LOCATED: CORNER OF BW	
DATE	TIME
3/28/2017	11:00
PULLED	3/29/2017 10:50

OVEN	
TIME IN	14:17
OVEN TEMP	105
TIME OUT	15:17
OVEN TEMP	105

* ANALYSIS	
ANALYZED BY:	TG
DATE:	3/29/2017
TIME:	15:55

45	% VSS 24HC
----	------------

RUN NUMBER	QC-1	QC-2	24HC
KNOWN	0	12-30	
WT. OF FILTER & SOLIDS	0.1398	0.1359	0.1452 0.1402
WT. OF FILTER	0.1398	0.1353	0.1342 0.1342
WT. OF SOLIDS	0	0.0006	0.011 0.006
ML. OF SAMPLE	25	25	10 10
SUSPENDED SOLIDS MG/L	0	24	1100 600
PASS(P)	P	P	TSS↑ FSS↑
SAMPLE STIRRED FOR ANALYSIS			
*All samples cooled in desiccator before analysis			
			500 VSS↑

To the best of my knowledge and belief, the information contained in this report is true, accurate and complete



Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

E. Formaldehyde Data (10 Pages)



Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

March 31, 2017

Cornell Gayle
EPA Region 4
980 College Station Rd
Athens, GA 30605

RE: Project: Formaldehyde
Pace Project No.: 35303043

Dear Cornell Gayle:

Enclosed are the analytical results for sample(s) received by the laboratory on March 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Aaron Crump
aaron.crump@pacelabs.com
(386) 672-5668
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



Pace Analytical Services, LLC

8 East Tower Circle

Ormond Beach, FL 32174

(386)672-5668

CERTIFICATIONS

Project: Formaldehyde

Pace Project No.: 35303043

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174

Alabama Certification #: 41320

Connecticut Certification #: PH-0216

Delaware Certification: FL NELAC Reciprocity

Florida Certification #: E83079

Georgia Certification #: 955

Guam Certification: FL NELAC Reciprocity

Hawaii Certification: FL NELAC Reciprocity

Illinois Certification #: 200068

Indiana Certification: FL NELAC Reciprocity

Kansas Certification #: E-10383

Louisiana Certification #: FL NELAC Reciprocity

Louisiana Environmental Certificate #: 05007

Maryland Certification: #346

Michigan Certification #: 9911

Mississippi Certification: FL NELAC Reciprocity

Missouri Certification #: 236

Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14

Nevada Certification: FL NELAC Reciprocity

New York Certification #: 11608

North Carolina Environmental Certificate #: 667

North Carolina Certification #: 12710

Oklahoma Certification #: D9947

Pennsylvania Certification #: 68-00547

Puerto Rico Certification #: FL01264

South Carolina Certification: #96042001

Tennessee Certification #: TN02974

Texas Certification: FL NELAC Reciprocity

US Virgin Islands Certification: FL NELAC Reciprocity

Virginia Environmental Certification #: 460165

Wyoming Certification: FL NELAC Reciprocity

West Virginia Certification #: 9962C

Wisconsin Certification #: 399079670

Wyoming (EPA Region 8): FL NELAC Reciprocity

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC

8 East Tower Circle

Ormond Beach, FL 32174

(386)672-5668

SAMPLE SUMMARY

Project: Formaldehyde

Pace Project No.: 35303043

Lab ID	Sample ID	Matrix	Date Collected	Date Received
35303043001	MHG	Water	03/28/17 11:10	03/29/17 09:39

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC

8 East Tower Circle

Ormond Beach, FL 32174

(386)672-5668

SAMPLE ANALYTE COUNT

Project: Formaldehyde

Pace Project No.: 35303043

Lab ID	Sample ID	Method	Analysts	Analytes Reported
35303043001	MHG	EPA 8315	WFH	1

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
 8 East Tower Circle
 Ormond Beach, FL 32174
 (386)672-5668

ANALYTICAL RESULTS

Project: Formaldehyde
 Pace Project No.: 35303043

Sample: MHG		Lab ID: 35303043001		Collected: 03/28/17 11:10		Received: 03/29/17 09:39		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8315 W HPLC Analytical Method: EPA 8315 Preparation Method: EPA 8315									
Formaldehyde	138	ug/L	0.10	0.027	1	03/30/17 10:25	03/31/17 09:18	50-00-0	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA

Project: Formaldehyde
Pace Project No.: 35303043

QC Batch:	359489	Analysis Method:	EPA 8315
QC Batch Method:	EPA 8315	Analysis Description:	8318 HPLC
Associated Lab Samples:	35303043001		

METHOD BLANK: 1936208 Matrix: Water
Associated Lab Samples: 35303043001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Formaldehyde	ug/L	ND	0.10	0.027	03/31/17 06:57	

LABORATORY CONTROL SAMPLE: 1936209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Formaldehyde	ug/L	200	133	66.3	39-153	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1936737 1936738

Parameter	Units	2052388001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Formaldehyde	ug/L	385	200	200	448	423	31.4	18.8	39-153	5.8	30	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALIFIERS

Project: Formaldehyde
Pace Project No.: 35303043

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Formaldehyde
Pace Project No.: 35303043

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
35303043001	MHG	EPA 8315	359489	EPA 8315	359802

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

No: 03/24/17-0002
Lab: Pace Analytical
Lab Contact:
Lab Phone:

No: 03/24/17-0002
Lab: Pace Analytical
Lab Contact:
Lab Phone:

AirbillNo:

Project ID: 17-0286


[illegible]


Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Special Instructions:

Analysis Key

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	 G. S. Davis Corvallis, Ore.	1/24/9 3/28/17			

	Document Name:	Document Revised:
	Sample Condition Upon Receipt Form	February 6, 2017
	Document No. F-FL-C-007 rev. 11	Issuing Authority: Pace Florida Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #
Project Manager:
Client:

WO#: 35303043

PM: ADC
CLIENT: EPA GA

Due Date: 04/12/17

Date and Initials of person:

Examining contents:

Label:

Deliver:

pH:

Thermometer Used:

Date: 3/29/17

Time: 9:39

Initials: TAL

Cooler #1 Temp. °C 0.4 (Visual) +0.7 (Correction Factor) 1.0 (Actual)

Cooler #2 Temp. °C (Visual) (Correction Factor) (Actual)

Cooler #3 Temp. °C (Visual) (Correction Factor) (Actual)

Cooler #4 Temp. °C (Visual) (Correction Factor) (Actual)

Cooler #5 Temp. °C (Visual) (Correction Factor) (Actual)

Cooler #6 Temp. °C (Visual) (Correction Factor) (Actual)

☒ Samples on ice, cooling process has begun☐ Samples on ice, cooling process has begun☐ Samples on ice, cooling process has begun☐ Samples on ice, cooling process has begun☐ Samples on ice, cooling process has begun☐ Samples on ice, cooling process has begunCourier: ☐ Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ OtherShipping Method: ☐ First Overnight ☐ Priority Overnight ☒ Standard Overnight ☐ Ground ☐ OtherBilling: ☐ Recipient ☐ Sender ☐ Third Party ☒ Unknown

Tracking # 1Z A43 F97 01 9289 5737

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No Ice: ☒ Wet ☐ Blue ☐ NonePacking Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Samples shorted to lab (If Yes, complete) Shorted Date: Shorted Time: Qty:

Comments:

Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Preservation Information: Preservative: _____ Lot #/Trace #: _____ Date: _____ Time: _____ Initials: _____
Chain of Custody Filled Out	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Relinquished Signature & Sampler Name COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rush TAT requested on COC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Sample Labels match COC (sample IDs & date/time of collection)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing acid/base preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All Containers needing preservation are found to be in compliance with EPA recommendation:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC, O&G, Carbamates		
Headspace in VOA Vials? (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

Comments/ Resolution (use back for additional comments): _____

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

F. Historical Weather (5 Pages)

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

Anniston, AL 

Anniston Metro

© 1:25 PM CDT on April 05, 2017 [GMT -0500]

Weather History for KANB - March, 2017

March

27

2017

View

Monday, March 27, 2017

Daily

Weekly

Monthly

Custom

	Actual	Average	Record
Temperature			
Mean Temperature	68 °F	57 °F	
Max Temperature	80 °F	69 °F	84 °F [1994]
Min Temperature	56 °F	45 °F	18 °F [1955]
Degree Days			
Heating Degree Days	0		
Month to date heating degree days	272		
Since 1 July heating degree days	1745		
Cooling Degree Days	2		
Growing Degree Days	17 [Base 50]		
Moisture			
Dew Point	60 °F		
Average Humidity	74		
Maximum Humidity	100		
Minimum Humidity	47		

Precipitation

Project ID: 17-0286

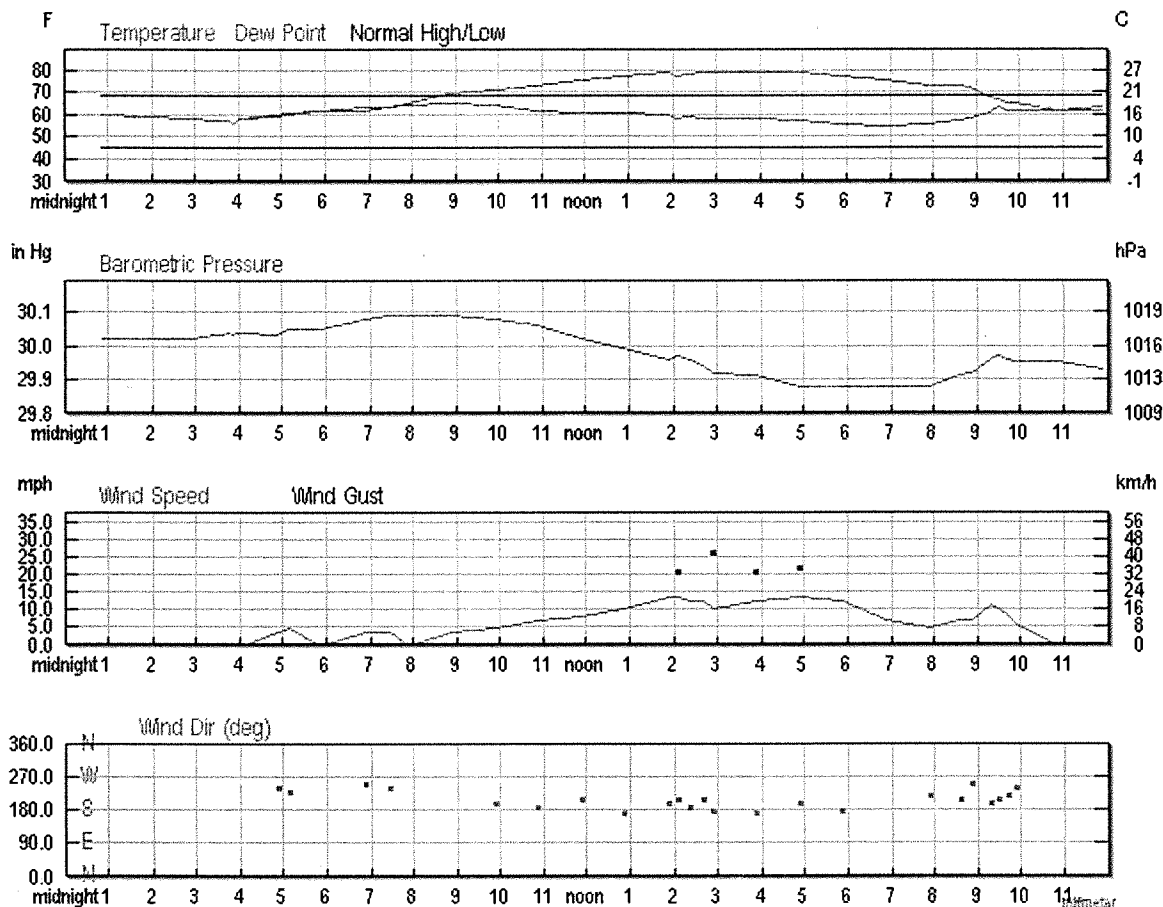
Page 79 of 92

	Actual	Average	Record
Precipitation	0.22 in	0.15 in	1.48 in (1976)
Month to date precipitation	3.30	4.36	
Year to date precipitation	13.82	13.96	
Sea Level Pressure			
Sea Level Pressure	29.99 in		
Wind			
Wind Speed	6 mph (SSW)		
Max Wind Speed	20 mph		
Max Gust Speed	28 mph		
Visibility	9 miles		
Events	Rain , Thunderstorm		

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary

Daily Weather History Graph



Search for Another Location

Trip Planner

Search our weather history database for the weather conditions in past years. The results will help you decide how hot, cold, wet, or windy it might be!

Date:

Astronomy

Mar. 27, 2017	Rise	Set
Actual Time	6:37 AM CDT	7:00 PM CDT
Civil Twilight	6:12 AM CDT	7:25 PM CDT
Nautical Twilight	5:43 AM CDT	7:54 PM CDT
Astronomical Twilight	5:13 AM CDT	8:24 PM CDT
Moon	6:29 AM CDT [3/27]	6:46 PM CDT [3/27]
Length of Visible Light	13h 13m	
Length of Day	12h 23m	

Waning Crescent, 0% of the Moon is Illuminated

Mar 27	Mar 27	Apr 3	Apr 11	Apr 19
Waning Crescent	New	First Quarter	Full	Last Quarter

Hourly Weather History & Observations

Time [CDT]	Temp.	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events
---------------	-------	--------------	----------	----------	------------	-------------	---------------	---------------	--------	--------

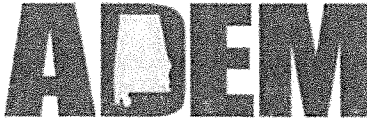
12:53 AM	609.1 in Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP								
1:53 AM	59.0 °F	59.0 °F	100%	30.02 in	9.0 mi	Calm	Calm	-	N/A
2:53 AM	57.9 °F	57.9 °F	100%	30.02 in	10.0 mi	Calm	Calm	-	N/A
3:28 AM	57.0 °F	57.0 °F	100%	30.03 in	2.5 mi	Calm	Calm	-	N/A
3:35 AM	57.0 °F	57.0 °F	100%	30.03 in	8.0 mi	Calm	Calm	-	N/A
3:48 AM	57.2 °F	57.2 °F	100%	30.04 in	1.8 mi	Calm	Calm	-	N/A
3:53 AM	55.9 °F	55.9 °F	100%	30.03 in	1.2 mi	Calm	Calm	-	N/A
3:58 AM	57.0 °F	57.0 °F	100%	30.04 in	2.5 mi	Calm	Calm	-	N/A
4:04 AM	57.9 °F	57.9 °F	100%	30.04 in	9.0 mi	Calm	Calm	-	N/A
4:53 AM	60.1 °F	59.0 °F	96%	30.03 in	10.0 mi	WSW	3.5 mph	-	N/A
5:10 AM	61.0 °F	60.1 °F	97%	30.05 in	10.0 mi	SW	4.6 mph	-	N/A
5:53 AM	62.1 °F	62.1 °F	100%	30.05 in	10.0 mi	Calm	Calm	-	N/A
6:53 AM	63.0 °F	62.1 °F	97%	30.08 in	10.0 mi	WSW	3.5 mph	-	N/A
7:29 AM	63.0 °F	63.0 °F	100%	30.09 in	10.0 mi	WSW	3.5 mph	-	N/A
7:53 AM	64.9 °F	64.0 °F	97%	30.09 in	10.0 mi	Calm	Calm	-	N/A
8:53 AM	69.1 °F	64.9 °F	87%	30.09 in	10.0 mi	Variable	3.5 mph	-	N/A
9:53 AM	71.1 °F	64.0 °F	78%	30.08 in	10.0 mi	SSW	4.6 mph	-	N/A
10:53 AM	73.0 °F	62.1 °F	68%	30.06 in	10.0 mi	South	6.9 mph	18.4 mph	N/A
11:53 AM	75.9 °F	61.0 °F	60%	30.02 in	10.0 mi	SSW	8.1 mph	-	N/A
12:53 PM	77.0 °F	61.0 °F	58%	29.99 in	10.0 mi	South	10.4 mph	-	N/A
1:53 PM	79.0 °F	60.1 °F	52%	29.96 in	10.0 mi	SSW	13.8 mph	27.6 mph	N/A

2:07 PM	77.9 °F Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP Understorm										
2:22 PM	78.1 °F	59.0 °F	52%	29.96 in	10.0 mi	South	12.7 mph	-	N/A		
2:42 PM	79.0 °F	57.9 °F	48%	29.94 in	10.0 mi	SSW	12.7 mph	21.9 mph	N/A	Thunderstorm	
2:53 PM	79.0 °F	57.9 °F	48%	29.92 in	10.0 mi	South	10.4 mph	26.5 mph	N/A		
3:53 PM	79.0 °F	57.9 °F	48%	29.91 in	10.0 mi	South	12.7 mph	20.7 mph	N/A		
4:53 PM	79.0 °F	57.0 °F	47%	29.88 in	10.0 mi	SSW	13.8 mph	21.9 mph	N/A		
5:53 PM	77.0 °F	55.9 °F	48%	29.88 in	10.0 mi	South	12.7 mph	-	N/A		
6:53 PM	75.9 °F	55.0 °F	48%	29.88 in	10.0 mi	Variable	6.9 mph	-	N/A		
7:53 PM	73.0 °F	55.9 °F	55%	29.88 in	10.0 mi	SW	4.6 mph	-	N/A		
8:38 PM	73.0 °F	57.0 °F	57%	29.91 in	10.0 mi	SSW	6.9 mph	-	N/A	Thunderstorm	
8:53 PM	72.0 °F	57.9 °F	61%	29.92 in	10.0 mi	WSW	6.9 mph	-	0.00 in	Rain , Thunderstorm	
9:19 PM	68.0 °F	61.0 °F	78%	29.96 in	2.0 mi	SSW	11.5 mph	17.3 mph	0.20 in	Rain , Thunderstorm	
9:29 PM	66.9 °F	63.0 °F	87%	29.97 in	6.0 mi	SSW	10.4 mph	-	0.22 in	Rain , Thunderstorm	
9:44 PM	64.9 °F	62.1 °F	90%	29.96 in	10.0 mi	SW	8.1 mph	-	0.22 in	Thunderstorm	
9:53 PM	64.9 °F	62.1 °F	90%	29.95 in	10.0 mi	WSW	5.8 mph	-	0.22 in		
10:53 PM	62.1 °F	62.1 °F	100%	29.95 in	10.0 mi	Calm	Calm	-	N/A		
11:53 PM	63.0 °F	62.1 °F	97%	29.93 in	10.0 mi	Calm	Calm	-	N/A		

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

G. Previous ADEM Inspection (8 Pages)

LANCE R. LEFLEUR
DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

January 12, 2015

Wayne Livingston
Oxford Waterworks & Sewer Board
PO Box 3663
Oxford AL 36203

RE: Facility Inspection
Oxford Tull C. Allen WWTP
NPDES Permit # AL0058408
Calhoun County (015)
FID 5734
Inspected 12/16/2014

Dear Mr. Livingston:

Enclosed is a copy of an inspection report for the above referenced facility. A copy of the inspection report has been transmitted to the Department's Water Division for a compliance determination and any follow-up as appropriate.

Should you have any questions regarding permitting, compliance, enforcement, or any follow-up action you should take to address any deficiencies noted, please contact your ADEM permit staff contact or the Water Division in Montgomery at H2Omail@adem.state.al.us or by phone at (334) 271-7810.

Should you have any questions regarding observations noted during the inspection, please contact me by email at jdc@adem.state.al.us or by phone at (205) 942-6168.

Sincerely,

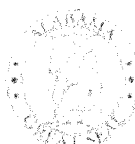
A handwritten signature in black ink, appearing to read "James Couch", is written over a horizontal line.

James Couch
Birmingham Branch
Field Operations Division

File: INSPR/9323
ecopy: Water Division
Enclosure: Inspection Report

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)
Project ID: 17-0286

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1189 (FAX)
Page 85 of 92



Alabama Department of Environmental Management
NPDES COMPLIANCE INSPECTION REPORT

PERMIT/FACILITY NUMBER: AL0058408	PERMIT X MUNICIPAL SP&P TYPE: INDUSTRIAL SID	ENTRY TIME/DATE: 0945 hrs 12/16/2014	INSPECTION CEI CSI TYPE: X PAI SSO
PERMIT EFFECTIVE DATE: 9/1/2013	PERMIT EXPIRATION DATE: 8/31/2018	EXIT TIME/DATE: 1400 hrs 12/17/2014	PART OF EPA X YES COMMITMENT NO

FACILITY NAME: Oxford Tull C. Allen WWTP		HUC CODE + SUBWATERSHED: 031501060507	LATITUDE: 33.58016	LONGITUDE: -85.91567
PHYSICAL ADDRESS: 2975 Silver Run Road	CITY: Oxford	COUNTY: Talladega	STATE: AL	ZIP: 36203
FACILITY X MAJOR CATEGORICAL INSIGNIFICANT TYPE: MINOR SIGNIFICANT PRIVATE		NAME OF RECEIVING WATER: Choccolocco Creek		
NAME(S), TITLE(S), AND PHONE NUMBER(S) OF ON-SITE REPRESENTATIVE(S): Max Gaskins, Plant Operator, 256-831-0086 Tim Gaskins, Laboratory Technician, 256-831-0086				
NAME, TITLE, AND PHONE NUMBER OF RESPONSIBLE OFFICIAL: Wayne Livingston, General Manager, (256)831-5618				
MAILING ADDRESS: P. O. Box 3663	CITY: Oxford	COUNTY: Calhoun	STATE: AL	ZIP: 36203
INSPECTION WAS: ANNOUNCED X UNANNOUNCED				

BRIEF SUMMARY OF INSPECTION FINDINGS / COMMENTS:
See comments on attached pages.

NAME(S) AND SIGNATURE(S) OF INSPECTOR(S): James Couch Emanuel Hawkins Robin Griffin Ethan Campbell Craig Mangham 	TELEPHONE: (205)942-6168	DATE: January 12, 2015
FOD OFFICE: X BIRMINGHAM DECATUR MOBILE MONTGOMERY		
HAS THE INSPECTION BEEN RECORDED IN NMS? X YES NO	NMS INSPECTION ID NO: 47818	
SIGNATURE OF REVIEWING SUPERVISOR:	TELEPHONE:	DATE:

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

**OXFORD TULL C. ALLEN WWTP
OXFORD WATERWORKS & SEWER BOARD
PERFORMANCE AUDIT INSPECTION
AL0058408
DECEMBER 16, 2014**

Name	Organization	Telephone
Robin Griffin, Environmental Scientist Supervisor	ADEM-Birmingham	205-942-6168
Rip Star, Chemist	ADEM-Montgomery	334-271-7700
James Couch, Environmental Scientist	ADEM-Birmingham	205-942-6168
Craig Mangham, Environmental Scientist	ADEM-Birmingham	205-942-6168
Emanuel Hawkins, Chemist	ADEM-Birmingham	205-942-6168
Ethan Campbell, Chemist	ADEM-Birmingham	205-942-6168
Max Gaskins, Wastewater Operator, Grade IV	Oxford Tull C. Allen	256-831-0086
Tim Gaskins, Laboratory Technician	Oxford Tull C. Allen	256-831-0086
Steve Martin and other relevant chemists	TTL	205-345-0816

FACILITY SITE REVIEW

The facility was a waste water treatment plant for the city of Oxford rated at 4.50 MGD. At the time of the inspection, there were solids on the side walls of the Equalization Basin. The operator explained that, on occasions, one of the SIDs that discharged to the plant would send a large amount of solids. When the SID discharge contained a large amount of solids, it was sent to the EQ basin for pretreatment. The EQ basin was also used as a collection of storm water during large rain events.

RECORDS AND REPORT

The facility maintained pH calibration logs, operation logs, and chains of custody for samples transferred to the contract laboratory. The facility did not have chains of custody for samples analyzed in-house. At the time of the inspection, the bottles containing the pH buffer were not the original containers and did not have an expiration date.

FLOW MEASUREMENT

Flow was measured using an 18 inch Palmer-Bowlus flume with a Multi Ranger Plus Ultrasonic Flow Meter. The flow meter had been calibrated in the past twelve months. At the time of the inspection, flow measurement was determined using a staff gauge in the flume. The measurement verified that the facility's secondary flow measuring device was reading within 10 percent as required.

SAMPLING

Composite sampling was performed using ISCO 3710 automatic samplers with refrigerated sample storage area. The aliquot volume was adequate. Samples were collected at appropriate locations. The refrigeration unit thermometer indicated the temperature to be below the 6 degrees Celsius as required. The thermometers being used were not certified. The sample tube on the

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

influent sampler between the sampler and the sample container was contaminated by solids attached to the pump tubing wall. The pump tubing needed to be changed.

TREATMENT AND OPERATION

The facility consisted of the following: bar screen, grit removal, aeration basin, equalization basin, sludge basin, two secondary clarifiers, chlorine contact chamber, filter press, and drying beds along with the pumps and blowers associated with each structure. At the time of the inspection, only one of the secondary clarifiers was being used because of low flow into the plant. All equipment appeared to be maintained and in good working order at the time of the inspection. A Grade IV operator was present at the time of the inspection.

SLUDGE DISSPOSAL

Waste sludge from the filter press and drying beds was sent to Cedar Hill Landfill.

EFFLUENT/RECEIVING WATERS

The effluent flowed into Choccolocco Creek. The effluent was light gray with no floating solids or sheen. The color dissipated after 10-12 feet downstream of the discharge point and did not appear to have a negative effect on the creek.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP

**Tull C. Allen Wastewater Treatment Plant
PERFORMANCE AUDIT INSPECTION**

December 16, 2014

AL0058408

Laboratory Review

On December 16, 2014 a Performance Audit Inspection (PAI) was carried out at the Tull C. Allen Wastewater Treatment Plant (2975 Silver Run Rd, Oxford, AL 36203) for Oxford Water Works and Sewer Board for NPDES Permit No AL0058408. The self-monitoring analyses conducted at the onsite facility laboratory were Dissolved Oxygen (DO), Hydrogen Ion (pH), Total Residual Chlorine (TRC), Carbonaceous Oxygen Demand (CBOD), Total Suspended Solids (TSS), Ammonia (NH₃), Color (ADMI) and E. Coliform (EC). Samples that were sent to the contract laboratory, TTL (3516 Greensboro Ave. Tuscaloosa, AL 35401) to be analyzed are the following analyses: Nitrite plus Nitrate (NO₃), Total Kjeldahl Nitrogen (TKN), Total Phosphorus (PO₄), Cadmium (Cd), Lead (Pb), Cyanide total recoverable (CN), Oil and Grease (O&G), and Toxicity (Pimephales chronic and Ceriodahnia chronic).

PERSONNEL

Information about Tull C. Allen Wastewater Treatment Plant was provided by Mr. Max Gaskins, Operator grade IV. Mr. Mike Livingston, the analyst was not present during the PAI. Information about TTL laboratory was provided by Steve Martin with thirty three years of experience.

FACILITIES AND RECORDS

Tull C. Allen Wastewater Treatment Plant and TTL Laboratory both have adequate space and proper safety precautions. All equipment was in good condition and raw data had been retained for at least three years at both facilities. Dated and initialed documentation of sample sheets were provided by TTL Laboratory however, Tull C. Allen Wastewater Treatment Plant personnel were not able to provide all the necessary SOP's and all the bench sheets were not initialed and clearly understandable.

SAMPLE HANDLING AND PRESERVATION

Chains of Custody were not available for samples collected for onsite analyses. Therefore proper preservation and collection in accordance with EPA guidelines could not be confirmed. Samples sent to TTL laboratory were preserved by preservative-prepared sample bottles provided by TTL laboratory and handled by TTL laboratory sample collectors, Chain of Custody documents were available for these samples.

GENERAL LABORATORY PROCEDURES

There were no certified weights on site. The thermometers need to be checked and recorded along with the balance. There should not be drinks and food stored with the samples.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 9020 B.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP
 Oxford Tull C Allen WWTP
 Performance Audit Inspection

METHODOLOGY

Reflecting the parameters required by the permit and the status of the laboratory method used for the National Pollutant Discharge Elimination System (NPDES) monitoring program and quality assessment, the following observations were made.

Tull C. Allen Wastewater Treatment Plant

DO

The method for D.O. was adequate for the NPDES self-monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500-O G.

pH

The method for pH was adequate for the NPDES self-monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500H+B.

TRC

The method for TRC was adequate for the NPDES self-monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500-CL G.

CBOD₅

With the Paperwork provided sample holding time could not be confirmed. Provided paperwork does not show documentation of sample neutralization or pH levels. The provided paperwork does not show if samples were analyzed at 20°C +/- 3°C. Provided paperwork does not show any check of D.O. meter calibration for every analysis. In addition, provided paperwork does not show daily checks for incubators, refrigerators, and the thermometers used should have an annual calibration check by a NIST traceable thermometer. Provided paperwork does not show traceability indicating reagent lot numbers or expiration dates. No documentation was provided for the make up of dilution water indicating reagents utilized or the date made. QC blank does not indicate if dilution water or distilled water is used, blanks exceeded the 0.2ppm depletion limit in the documentation provided and data was not qualified or voided. Provided paperwork shows samples having GGA values exceeding 198 +/- 30.5 ppm limit and do not appear to be voided.

Regulatory Requirement: See Std. Methods, 22th ed. 2012. Method 5210 B.

TSS

Paperwork provided does not show re-drying and re-weighing of filter until weight change loss of less than 0.5mg is achieved. Provided paper work does not show if TSS samples are dried at 103-105°C for at least an hour, cooled in desiccators and then weighed. Provided paper work does not show duplicate TSS samples throughout test batches. Provided paper work does not show if samples were well stirred using a magnetic stirrer prior to analysis. **Regulatory Requirement:** See Std. Methods, 22th ed. 2012, 3(c) repeat the cycle of drying, cooling and desiccating and weighing until a constant weight is obtained or until the weigh change is less than 4% of previous weight or 0.5mg whichever is less. 3 (c) dry for at least one hour at 103-105°C in an oven, cool in a desiccators to balance temperature and weigh. Quality Assurance /quality control Para 1 line 1 and 2...without quality control results there is no confidence in analytical results reported from test. Para 2 lines 9 and 10...evaluate precision through analysis of sample duplicates. 3 c, stir sample with a magnetic stirrer and while stirring pipette a measured volume onto the seated glass filter.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP
 Oxford Tull C Allen WWTP
 Performance Audit Inspection

E.C.

Documentation provided references Standard Methods 9222B, this is for total coliform, not E. coli. Documentation also references EPA method 1603 which is approved for E. coli. Holding time could not be confirmed due to lack of chain of custody (EPA 1603 8.1.3). Quality control samples which include but are not limited to positive/negative controls, media verification, matrix spikes, sterility checks, and IDC's were not detailed in the documentation provided (EPA 1603 9.2). Incubation temperatures, thermometer calibrations, and media storage temperatures were not included in the documentation provided (EPA 1603 10.0). Facility uses Aqua check media plates, the plates shown to the inspector expired 9/30/2014. Documentation provided does not include lot numbers or expiration date of plates utilized to that run. Sample volumes are 1mL, 2mL, and 3mL. It is recommended the facility use sample volumes that will yield a count between 20-60 colonies; the highest count in the documentation provided was 5 (EPA 1603 11.5). No colony verification documentation was provided to ensure the proper colonies are counted (EPA 1603 12.0). No documentation was provided to show the dilution water for the samples was the phosphate buffer solution required in the method (EPA 1603 11.6)

Regulatory Requirement: See EPA Method 1603.

NH₃-N

There were no duplicates or references analyzed for Quality Control in the documents provided. There were expired chemicals on site. They didn't have record of any MDL and IDC in the documents provided. There were no calibration standards and charts in the documents provided. The equipment maintenance log was not presented in the documents provided.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500-NH₃ B & C. Page 4-1 4020 A Quality Assurance/Quality Control Para 1 line 1 and 2...Without quality control results there is no confidence in analytical results reported from test. Para 2 lines 9 and 10...evaluate precision through analysis of sample duplicates.

ADMI color

Provided paper work does not show any quality control run on spectrometer before color analysis was done. Provided paper work shows no instrument calibration or verification run before samples are run for ADMI color. Also, provided paper work does not show if color sample had to be filtered or large particles removed before analysis.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, 2120(3) a instrument calibration, establish curves for each photometer. 2120, (3) c, Determination of light transmission characteristics, thoroughly clean absorption cells and determine sample light transmittance with three filters to obtain transmittance values.

2120 E. 1 c. interference: all large particles and turbidity must be removed.

Sampling Evaluation and Performance Audit Inspection Oxford Water Works and Sewer Board Tull C. Allen WWTP
Oxford Tull C Allen WWTP
Performance Audit Inspection

TTL Laboratory:

NO₃

The method for Nitrate plus Nitrite was adequate for the NPDES self-monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500 –NO₃-E and EPA 353.2

TKN

The method for Total Kjeldahl Nitrogen is adequate for the NPDES monitoring

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500 NO₃-E and EPA 351.3

PO₄

There was no documentation of a calibration blank in the information provided.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500 P and EPA 365.4

O&G

The method for Oil & Grease is adequate for the NPDES monitoring.

Regulatory Requirement: See EPA 1664A

CN

The method for Cyanide is adequate for the NPDES monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 4500 –CN-C

Metals (Cd & Pb)

The method for Cyanide is adequate for the NPDES monitoring.

Regulatory Requirement: See EPA Method 200.7

Toxicity

The method for Toxicity is adequate for the NPDES monitoring.

Regulatory Requirement: See Std. Methods, 22th ed. 2012, method 8010

APPENDIX B

**SUPPLEMENTAL ENVIRONMENTAL PROJECT
DESCRIPTION**

The Supplemental Environmental Project (“SEP”) is an effort to reduce pollutants by applying a treatment system designed to separate additional solids from the regulated process wastewater generated by the Facility, and to significantly reduce the volume of regulated wastewater that would otherwise be discharged to the POTW. During limited periods of maintenance or unplanned shutdowns of this treatment system, the Facility may need to discharge wastewater to the POTW without the additional treatment it provides, and shall comply with an applicable ADEM permit for such discharges.

The completed SEP shall sustain pollutant reductions through a three-step process: pre-cleaning, evaporation, and steam generation. In the pre-cleaning step, additional large solids in the process wastewater will be separated using both a screen and a decanter centrifuge. These solids will be incinerated in a pre-existing furnace (“K-4 Wood Process Heater Unit”) generating heat for the Facility’s production process. The SEP shall not increase air emissions above the Facility’s applicable ADEM air permit. The decanted wastewater will be filtered once again before entering a falling film evaporator and vapor compressor system, where it will be partially evaporated into a concentrate containing 10-20% solids. This concentrate will also be incinerated in the K-4 Wood Process Heater Unit. The evaporator-compressor system will output a volume of water that will supply a new steam boiler. The steam produced by this boiler will be added to the steam generated for the Facility’s production process, conserving an equivalent volume of potable water that is presently consumed.

Implementation Schedule

Implementation of the SEP requires design, construction, installation, start-up testing, and then steady-state operation of the treatment system. Kronospan shall proceed with the following implementation schedule, achieving a full steady-state operation of the treatment system within seven-hundred ninety (790) Days of the Effective Date of this Consent Decree:

1. An order for the treatment system shall be placed with a vendor within sixty (60) Days of the Effective Date of this Consent Decree.
2. Site-specific design engineering shall be completed within one hundred forty (140) Days of placing the order with the vendor.
3. Preparation of the construction site shall be completed within one-hundred twenty (120) Days of completing the site-specific design engineering work.
4. Installation of the treatment system shall be completed within one hundred sixty (160) Days of its delivery by the vendor; delivery is expected within two hundred fifty (250) Days of completing the construction site preparation work.
5. Start-up testing shall be completed, and steady-state operation shall be achieved, within sixty (60) Days of installing the treatment system.

APPENDIX C**List of Deliverables**

Deliverable	Triggering Event	Due Date	Reference
Objectionable Solids Identification Plan	Entry of Consent Decree	90 Days after Effective Date of Consent Decree	54.a.i.
Objectionable Solids Report	Approval of Objectionable Solids Identification Plan	90 Days from Approval of the OSIP	54.a.iii.(d)
Objectionable Solids Remedial Plan	Approval of Objectionable Solids Report if applicable	120 days from the approval of the Objectionable Solids Report	54.a.iii.(d)
Implementation and/or Construction	Approval of Remedial Plan	180 days from approval of Remedial Plan	54.c.i.(b)
Certification of full completion of implementation of the Objectionable Solids Remedial Plan	Completion of all aspects of the Objectionable Solids Remedial Plan	Within thirty (30) Days of completion of all aspects of the Objectionable Solids Remedial Plan	54.c.ii.
Certification that the finalized Audit contract has been engaged	Completion of all aspects of the Objectionable Solids Remedial Plan	Within thirty (30) Days of completion of all aspects of the Objectionable Solids Remedial Plan	54.c.ii.
Third-Party Retention Plan	Completion of Remedial Plan schedule	Upon completion of the approved Remedial Plan schedule	54.d.i.
Beginning of Audit timeframes	Transmittal of certified completion of Remedial Plan	Shall begin within fourteen (14) days of certification of completion of Remedial Plan	54.d.ii.(c)(1)
Third Party Verification Report	If Objectionable Solids Report identifies sources of Objectionable Solids, Completion of Sampling Events described in 54.d.ii(c)(4)(vi)	Sixty (60) days from completion of sampling events	54.d.ii(c)(3)

Supplemental Objectionable Solids Remedial Plan	If the Third-Party's Verification Report finds that Objectionable Solids are still present or otherwise still have credible potential to appear in the Facility's discharge to the POTW	Within sixty (60) Days of submittal of Third-Party Verification Report	54.e.i.
Draft Third Party Contract	Third Party Verification Report	At time of Supplemental Objectionable Remedial Plan	54.e.ii.
Certification of completion of Supplemental Objectionable Solids Remedial Plan	If the Third-Party's Verification Report finds that Objectionable Solids are still present or otherwise still have credible potential to appear in the Facility's discharge to the POTW	Within 30 Days of completion of all aspects of the Supplemental Objectionable Solids Remedial Plan	54.e.iii.
Standard Operating Procedure for Flow Reporting	Effective Date of Consent Decree	90 days from Effective Date	55.a.
Slug Discharge Control Plan	Effective Date of Consent Decree	One hundred eighty (180) days of effective date	56.a.
Pretreatment Compliance Training Program	Submittal of the Verification Report	Ninety (90) days after submittal of Verification Report	57.a.
Initial Training	Approval of Training Program	Ninety (90) days of approval of Training Program	57.c.i.
Refresher Training	Annually	Annually	57.c.ii.
New Employee Training	Start of employment	Ninety (90) days of start of employment.	57.c.iii.
Post-SEP-Implementation Training	Notification that SEP is satisfactorily completed the SEP	Ninety (90) days from notification	57.d.